

RECORD

46838  
46170  
R  
20



(1984 - 1986)

2-S ..... (Aluminum) Storage  
3-S ..... (Aluminum) Storage

..... 1000-4000 (m) .....  
HAWAII

.....

.....  
 2-4 .....  
 1-4 .....

7-3 . . . . . 1952-2014 . . . . . 6134

10-101 ..... 10-101 ..... 10-101

11-01 , . . . 8-204-51534 , . . . 01204 , 11-01

1934-1935 .....

.....

11-20 ..... 1984-1984 ..... 1984-1984

11-12 ..... 4534-4534 ..... 11-12

12-03 .....

65-86 ..... 10130

..... 2454-2554 .... 254 photo 1st

Page 10 of 10



# Collection and Field Note Book

No. 76

(June 20, 1965 - Aug. 1, 1965 )

(46190 ----- 46838)

Page No.

## CALIFORNIA

Hayward (Alameda County) ..... 2-3  
46190 ..... 2-3

## HAWAII

Honolulu (Oahu)..... 46191-46192 ..... 2-3

WAKE ISLAND..... 2

## MARIANAS

GUAM..... 4-53

Tamuning ..... 46193-46194 ..... 4-5

Fonte River..... 46195-46202 ..... 4-7

Agana ..... 46203-46207 ..... 6-7

Ritidian Point....46208-46211 ..... 10-11

NAS, Agana ..... 46212-46216 ..... 10-11

Mangilao..... 46217-46218 ..... 14-15

Harmon Field.....46219-46221..... 14-15

Anderson AFBBase.. 46222-46223..... 16-17

Ritidian Point....46224-46234 ..... 16-19

Info from Sue ..... 20-21

Cetti Bay ..... 22-23

Talofofo Bay ..... 46235-46242 ..... 24-25

Mt. Lamlam ..... 46243-46266 ..... 26-33

## GUAM (continued)

Talofofo Bay..... 46267-46271 ..... 36-37, 34

Asanite Bay..... 46272-46278 ..... 36-39, 35

Toto..... 46280 ..... 38-39

Agana ..... 46281 ..... 38-39

Yona ..... 40

Inarajan ..... 46282-46289 ..... 42-43, 40

Nimitz Hill ..... 46290 ..... 44-45

Barrigada ..... 46291 ..... 44-45

Inarajan ..... 46292-46293 ..... 44-45

Merizo ..... 46306-46307..... 52-53

NAS, Agana ..... 46294-46298 ..... 46-47

Inarajan ..... 46299-46305 ..... 50-53

## CAROLINE ISLANDS

Yap ..... 54-71  
46308-46357 ..... 56-71

Yap-Ulithi via M/S ROQUE ..... 72

Ulithi ..... 72-107  
46358-46507 ..... 78-107

Yap ..... 46508-46608..... 108-133

Falalap ..... 134-135

Ulithi ..... 135-149

Ulithi-Fais..... 150-153

Fais ..... 46648-46733..... 154-167

Lamotrek ..... 46734-46838 ..... 184-198  
173-198



Guam labels  
apparently still

missing

46227

46275



# Bronson, 55, Succumbs to Heart Attack

Albert B. Bronson, 55-year-old businessman from Tamuning, died Wednesday night shortly after he collapsed while walking along the beach behind his residence, police reported yesterday.

Bronson was pronounced dead upon arrival at Guam Memorial Hospital at 10:20 P.M. by Dr. Jesus F. Paryna, a GMH physician.

Police said an autopsy performed yesterday morning reported heart attack as cause of death.

According to police, Bronson was walking along the beach with a family friend when he was stricken at about 9:45 P.M. Wednesday. The friend, whom police did not identify, immediately notified Mrs. Bronson who called the tamuning Fire Station for an ambulance.

Police quoted Mrs. Bronson as saying her husband had been suffering from heart condition.



F. R. Fosberg  
Book 76  
Begin with  
# 46190  
End with  
# 46838



## Standard Miniature Blank Book

No. 665 9½ x 6 120 Pages Units  
No. 667 9½ x 6 200 Pages Units  
No. 668 9½ x 6 300 Pages Units

Made in the Following Rulings

Journals, Day or Cash Books, Double S and Cts.

S. E. Ledgers, S and Cts.

Double Entry Ledgers

Records with Margin Line

When ordering give Number and Ruling desired

Made in U. S. A.

*A Boorum & Pease Product*

If found please return to :  
F. R. Fosberg

**Pacific Vegetation Project**  
c/o National Research Council  
2101 Constitution Ave., N.W.  
Washington 25, D. C., U.S.A.



1

3

7.

at

sw.



1965

June 20 Hayward, <sup>Alameda Co.,</sup> Calif.

cultivated ornamental

June 22 Honolulu, Oahu, (H.).  
in trampled lawn, Wilder Ave + Kihikihi St.

91 *Euphorbia prostrata*

~~scarce~~ rare

92 *Synedrella*  
common

June 26 - Wake Island  
brief stop during night.

Coconut and Pandanus  
tectorius trees 3-4 m. tall  
have been planted across  
from terminal bldg. *Gossypium*  
growing here.

*Ipomoea tuba* abundantly  
in flower at 4:30 a.m.,  
flowers strictly erect,  
somewhat fragrant.

Inner sepals several mm longer  
than outer. Stamens and  
stigma well included.

A large depression,  
perhaps a borrow pit,  
excavated between  
terminal and shore.

shrub 2 m. tall; buds only.

prostrate, green, not at  
all purplish.

prostrate; rays yellow,  
4-5, short.



with M. Evans

46193

June 26 - ~~Agave~~  
Tamuning  
around buildings  
*Polygonum capitatum* Hamilton & D. Don  
planted as lawn, on coral gravel

94 *Lagenophora*?  
abundant on coral gravel

with M. Evans

9

June 26-27 Lower Fonte River  
on slope of deep ravine  
95 *Adenanthera pavonina* L.  
~~tree seen~~ one seen

9

96 *Tectaria crenata*  
common on limestone ledges

2

97 *Thelypteris*  
occasional on contact  
between limestone and Tuff

7

98 *Glochidion*  
occasional on limestone  
ledge in semi-shade

12

99 *Phyllanthus*  
very common on cut  
in limestone

46200

5

*Glochidion*  
common in dense shade  
in *Leucaena* thicket with scattered  
large trees

14

01 *Pterocarpus*  
one tree seen

2 m.

introduced recently by H. Mayo nursery

prostrate, mat-forming,  
leaves ~~dark~~ red-marked,  
flowers pale pink.  
solid stands, rosettes  
of few leaves, scape erect.

15 m

↓

tree about 15-20 m. tall,  
flowers dull yellow  
fronds ascending

fronds arching  
from short prostrate  
rhizome.

shrub 3 m. tall,  
leaves reddish  
when young, scarcely  
or not at all glaucous  
beneath, fruit green,  
oil scarlet.

scarcely branched  
erect shrub 1-1.7 m.  
tall, flowers greenish.

slender sprouts from  
dead snags; leaves  
somewhat to not at all  
glaucous, more so when  
young.

large spreading umbrella-  
shaped tree with several trunks,  
about 29 m. tall



6

46202

1

1965 Marianas Is.

*Cananga odorata*  
common

with  
M. Evans

June 27 - Agaña  
on gravel flat just  
back of beach

9

03

*Dentella hyssopifolia*  
occasional, with *D. repens*

2 m

↓

1

04

*Spermacoce suffruticosa* Jacq.  
rare

6

05

*Hedyotis corymbosa* (L.) Lam.  
common

1

06

*Alysicarpus*  
occasional

8

07

*Paspalum longistachyum*  
common

General appearance  
of vegetation in Agaña -  
font area - green,  
little evidence of  
typhoon remaining -  
*Leucaena* mainly  
fruiting, some evidence  
of snail-rasping  
of smaller branches.  
Young *Heterospatha elata*  
abundant. Glochidion  
shrubs under *Leucaena*  
mostly seem to have

Guam

7

tree 8 m. tall,  
flowers green.

very prostrate, rooting  
at nodes, forming  
thin close mats, flowers  
white.

flowers white.

ascending & prostrate,  
flowers white.

prostrate, forming  
small mats; flower  
maroon.

dense small tufts,  
culms spreading  
to ascending.

main stems dead  
and side branches  
green, a very few flowering.  
Leaves much larger  
than ~~in~~ on bushes in  
volcanic area. Fruit  
very similar. Young  
leaves tend to be  
glaucous beneath,  
older not. The large  
tree along Fonte River  
collected sterile in 1950  
is in fruit - is *Pterocarpus*.



*Delonix regia* is in full bloom, is common, varies from scarlet (usual) to orange red.

On way to north end on the Agaña-Wettye Andersen road no patches of anything like good forest seen - some Pandanus scrub and general secondary thicket. No *Pennisetum polystachyon* seen in open areas - probably there but too young to be conspicuous. *P. purpureum* is low and only beginning to sprout actively, no racemes.

### ~~Northwest~~

Andersen - Northwest field road all secondary thicket with scattered skeletons of larger trees.

Northwest Field area - *Spathoglottis* flowering. *Operculina* not seen.

Pitidian Point - forest is completely

closed again - no sign of typhoon damage except numbers of dead or partly dead trees sticking up through canopy.

One *Peritiers longipetiolata* apparently remaining of two seen in 1957.

Two more may be this but a half-mile or so away, not certain.

What seems to be the *Serianthes nelsoni* tree seen in 1957 still looks healthy, but too far away to be sure if it is this. The forest here seems to be about the best remaining in any easily reached place on the island.

*Dentella* has reached here, in road.

*Pluchea odorata* is abundant along road. *Morindica* and *Passiflora* very abundant.

*Triphasia* with ripe fruit.

*Flagellaria* with buds.

*Ficus prolixa* var. with green fruits.

Weather - sunny with broken clouds, warm, trade winds, died down p.m.



10

1945 Marianas Is.

with  
M. EvansJune 27 - Ritidian Point  
Lighthouse, top of cliff.  
edge of forest along  
road

#6208

*Nephrolepis biserrata*  
on limestone at base of tree

6

09

*Geniostoma micrantha*  
rare

June 29 - Tuman Heights

2

10

~~Hosta~~ *Eucharis amboinensis*  
planted

6

11

*Bougainvillea cf. spectabilis*  
plantedJune 30 - Trust Territory Compound,  
NAS Agañaweed in compound, in  
lawns around buildings

12

*Passiflora suberosa*  
common

3

13

*Gomphrena dispersa* Standl.  
local

1

14

*Torenia*  
trampled,

1

15

*Spermacoce*  
near building

1

16

*Mitracarpus hirtus* ?

Guam

11

165 m.

fronds erect, tending  
to fall or arch.  
shrub about 2 m. tall.

30 m.

acaulous, scapes erect,  
exceeding leaves, terete,  
flowers white; fruit  
globose, green, immature,  
one cell of three developed.spiny scrambler,  
climbing on house, bracts  
deep crimson, perianth  
white.

70 m

flowers pale greenish,  
ripe fruit dark blue.  
depressed, but this may  
be due to mowing.  
prostrate, flowers yellow.



June 28 - Weather - completely overcast in morning, intermittent rain.

June 29. Sunny, moist broken clouds, hot. Hard showers in afternoon. Calm in evening. *Wedelia trilobata* around post office - sterile, apparently naturalized.

June 30. Sunny, some clouds, gentle trade winds.

South end of Tumon Bay at bottom of cliffs - scrub forest of *Barringtonia* and *Thespesia* on ~~the~~ edge of lowest terrace - some *Clerodendrum inerme*, *Wedelia biflora*, *Pisonia grandis*, *Allophylus cf. timorensis*, one tiny plant of *Eugenia palumbi*, a few small *Pluraya ruderalis*.

Back of this *Pandanus dubius* and *P. tectorius*, very scrubby.

2-step erosion ramp at base of terrace, well developed, nip above it. The erosion ramp appears to be a very coarse and very hard beachrock.



14

1965 Marianas Is.

Salvia  
sp.

July 1 - Mangilao

in <sup>low</sup> secondary thickets46217  
6*Jatropha gossypifolia* L.  
colony of 20-30 plants

3

18 *Dentella repens* Forst.  
on hard coral gravel roadsideJuly 1 - east end of  
Harmon Field

6

19 *Saccharum spontaneum* L.  
very common along the  
road on coral rock in  
open areas.

July 2 - Tuman Heights

6

20 *Plumeria obtusa* L.

planted in dwelling yard

~~*Bidens beringensis*~~  
abundant in field ~~around~~  
houses

July 3. same

7

21 *Bidens leucantha*  
abundant in yards  
around houses

Guam

15

~~25~~

65 m

shrub 2 m. tall, dark  
purplish green, hair green,  
flowers red, latex  
slightly milky but  
translucent.very prostrate, forming  
thin mat, rooting at  
nodes; flowers white.erect close tufts,  
rhizomes short, thick,  
~~erect~~ flowering canes  
to 3 m. tall.30  
45 m.shrub 2.5 m. tall  
very lactiferous;  
corollas white with  
yellow centers; fragrant.  
"Singapore Plumeria" (H. Mayo)30  
45 m.herbs up to 1.5 m. tall  
rays white, disk yellow.



Labels  
16

July 3 - South entrance  
to Andersen Air Force Base  
In low weedy meadow  
near road

170 m

46222 *Cyperus ligularis* L.  
locally common

8 23 *Paspalum longisetum*  
common

with  
M. Evans

July 3 - Ritidian Point,  
plateau near lighthouse  
in dense scrubby  
mixed forest on  
rough limestone

160 m.

20 24 *Guamnia maiannensis*  
~~slender tree~~ <sup>ae</sup>  
common

6 36 25 *Serianthes nelsonii* Men.  
very rare, one tree seen

7 26 *Heritiera longipetiolata* Karst.  
very rare, 2 trees seen

9 27 *Psychotria*  
locally common

1 28 *Cycas circinalis* L.  
common

3 29 *Eugenia reinwardtiana*  
common

loose clumps, culms  
spreading, leaves  
slightly grayish green.  
tufts, culms spreading.

slender tree about  
5 m. tall; flowers  
with fleshy perianth,  
greenish yellow;  
fruit immature.

tree about 14 m. tall,  
3 dm dbh. flowers  
with calyx and corolla  
greenish white, filaments  
white at base, maroon  
purple for most of length,  
anthers yellow.

tree 10-12 m. tall, flowers  
green.

shrub 1.5 m. tall,  
flowers white, fruit immature.

shrub 2 m. tall,  
flowers white



July 3 - Pitidian Point Light

Area between road and cliff to north is dense closed mixed forest.

Two *Heritiera* trees are about 200 m. 30° E of S. and one *Serianthes* about 300 m. 40° E. of S.

from p. 16

- 46230 *Eugenia renwardtiana*  
common in shrub layer
- 31 *Psychotria malaspina*  
common in shrub layer
- 32 *Psychotria malaspina*  
common in shrub layer
- 33 *Psychotria mariana* Bartl.  
locally common in small opening
- 34 *Claoxylon marianense* Wm. M. A.

160 m

- shrub 3 m. tall,  
fruit not quite mature,  
pale green.
- shrub 1.2 m. tall,  
flowers white, fruit  
immature.
- slender shrub 2.5 m  
tall, flowers white, fruit  
immature.
- shrub 2.5 m. tall;  
flowers white, fruit  
green, turning red.
- small tree, 10 m. tall,  
fruit immature,  
each cell 2-lobed.



Feb. June 3 -

Information from  
a Guamanian girl at  
Shells of Mirnesia.

Young seeds, a cm or  
two in diam. ~~are few~~ of  
*Cycas circinalis* (*fadang*)  
are pounded, applied  
to persistent sores on  
face - clear up the  
sores in a few days.

The juice of boiled  
leaves of *Morinda*  
*charantia* is drunk for  
ulcers, also to clean  
intestines in case of  
indigestion and gas.

Leaves of "*banalo*" [*Ether peris*]  
are used for gas on stomach.

Bark of *Terminalia*  
*catappa* peeled off,  
heated, coconut oil or  
other oil added, wrapped  
hot around sprained  
ankles.

Heart of base of  
dead banana stalk  
used to poultice and  
cure deep ulcers.

Alma Hill said that in  
certain of the Motlock Is.  
it is believed that eating  
fruits of *Morinda citrifolia*  
by a man has a  
contraceptive effect.

Jose Torres says *gab gab*  
(*Tacca leontopetaloides*)  
tubers crushed, starch  
washed out with water, resulting  
fresh suspension drunk  
for fever.



July 4 - head of Cetti Bay  
basalt road cut with  
water seeping out -  
*Pteris vittata* occasional  
on this cut.

Hot day, sunny with some clouds.  
Saddle bet. Lamclam  
and Jumulung Manglo  
and slope of Jumulung M.  
has been burned,  
as well as the road  
work - bad erosion  
scars have started.

Along road up the  
mountain a number  
of *Cyathea lunulata* in  
open *Miscanthus* and  
edges of thickets.

*Melastoma* has white  
flowers. *Polygonum*  
*paniculatum* very common  
on eroded places.

On limestone crag  
to north of road is a  
patch of thick scrub  
forest - *Aglaia*, *Elaeocarpus*,  
*Guamnia*, *Pandanus*, etc.

The limestone is very  
dissected and rough.  
The edges, for a few  
m. are covered with  
*Miscanthus*, and  
some clumps are  
up on the top of the

limestone ridge. Leaves  
quite wide. *Melinilla*  
*rosea*, *Maesa*, *Piper*  
*guianense*, and an  
unidentified sterile,  
opposite leaved vine  
are common in the  
undergrowth. *Freyrinetia*  
also very common, a  
few in bloom. *Morinda umbellata*,  
some *Pithecellobium*. The  
interior of the forest is  
mossy and cool.  
Many ferns - *Asplenium*,  
*Belvisia*, etc.

July 5 - high limestone ridge  
north of Talofofo Bay and  
the plateau at its base,  
above the road, covered  
by mixed forest, with  
small cultivated  
clearings up on the  
ridge on flat spots.  
One place, high on the  
ridge, appears to be a  
plugged sink-hole  
with straight sides  
with caves in them.  
Many swifts flying  
around this area.

*Momordica* common on  
floor of sink-hole.

Hot sunny day, some clouds.  
Hard rain toward evening at Merigo.



Labels  
typed  
with  
M. Evans

1965 Marianas

July 5 - high ridge  
~~south~~ north of Talofoko Bay  
in scrubby forest on  
rough limestone

46235

Ramalina?

c

on twigs of dead tree

b

36

(lichen)

on twigs of dead tree

b

37

*Eucalyptus circinalis* L.  
common

3

38

*Mucuna gigantea*climbing in tree in small  
clearing in

b

39

*Annona*one tree in small cultivated  
clearing

same - ~~on~~ just below  
edge of rough limestone  
cliff in pits and crevices

3

40

*Hedyotis foetida*  
occasional

July 5 - "Pirate's Cove", <sup>Togcha,</sup> about 1 mi. n.  
of Talofoko Bay  
sandy beach

c

41

*Canavalia rosea*  
common

2

42

*Sophora tomentosa*  
common

110 m

110 m

110 m

100 m

100 m.

130  
~~145~~ m.

2 m.

shrub 1 m. tall, leaves  
1-1.5 m. long; sporophylls  
and bracts erect in  
a central mass.

extensive vine climbing  
in tree, upper parts  
with fruits dead,  
sprouts growing  
from lower parts.

tree about 5-6 m. tall,  
petals 3, erect, very  
fleshy, pale green.

dwarf shrub; ~~or~~ when  
crushed very disagreeable;  
flowers white.

prostrate vine, flowers  
bright rose ~~pink~~ color.  
shrub 2 m. tall  
flowers bright yellow.



Labels typed

with  
M. vanJuly 4 - south peak of  
Mt. Lamnamin thick mossy scrub forest  
on rough limestone

46243

Maesa

6

common

2

44

Medinilla rosea - sterile branches?

common

2

45

Moriinda umbellata var. glandulosa  
occasional, climbing in trees

D

380 m

shrub 1.5 m. tall,  
fls. and ripe fruit white.  
prostrate vine

twining vine.



July 6 - Mt. Lamlam  
with informant, Jose Torres.

*Pupulan aniti* - *Piper guianense*  
not used

Abas - *Psidium guajava*.

Tintanchina - *Cestrum diurnum*

Piga - *Alocasia*.

stems cooked and eaten  
in times of famine.

Nunu - aerial roots cut into  
sections, split and boiled,  
water drunk as antipyretic

*Morinda citrifolia*

budding heads chewed  
with betel nut. "lada"

*Davallia solida*

used medicinally

The road, from the  
Lamlam-Jumullong Mang's  
saddle north to Lamlam  
is not passable - in  
places partly washed  
out and overgrown with  
*Miscanthus*, *Leucaena*,  
*Piper*, *Alocasia*, etc. in  
places.

Hot sunny day with  
some clouds.



July 6 - Mt. Lamtarn

46246

*Jasminum simplicifolium*  
in scrub on limestone peak

1 47

*Psidium guajava* L.  
in scrub on rough limestone

6 48

*Toenia*  
common locally in trail

5 49

*Maesa*  
common in open scrub

7 50

*Belvisia mucronata*  
~~an~~ epiphytic on trunk  
of *Pandanus tectorius*

9 51

*Geniostoma micrantha*  
rare in scrub forest  
on rough limestone

5 52

*Piper guahamense*  
abundant in undergrowth  
in open scrub forest on  
rough limestone

6 53

*Cestrum diurnum* L.  
common in openings in  
scrub forest on rough limestone

8 54

*Tarenna sambucina* var. *glabrata*  
rare in scrub forest on  
rough limestone

9 55

*Pisonia umbellifera*  
rare in open forest on rough  
limestone

405 m.

liana, flowers white,  
fragrant, corolla falling  
readily.

400 m.

sterile shrub 2 m. tall  
"abas"

370 m.

prostrate, forming  
loose mat, corolla yellow.  
shrub 2 m. tall; fruit  
translucent white, soft,  
when mature, not much  
flavor, but a slightly refreshing  
taste.small erect tree 4 m. tall;  
flowers white, hairy within,  
fruit green until dehiscence,  
when it turns blackish; seed  
mass orange.shrub 1-1.5 m. tall;  
ripe fruiting spikes  
brick-red, pendent,  
soft and mushy.  
"pupulan-aniti"shrub 2 m. tall, flowers  
white, fruits black.  
"tintan china"shrub 2.5 m. tall,  
flowers whitish, fruit  
immature.

360 m.

large tree 20 m. tall; buds  
dull pinkish white, 10 stamens  
in 1 or 2 open flowers.



- 46256 1 *Cycas circinalis* L.  
common in <sup>open</sup> scrub forest  
on rough limestone
- 7 57 *Morinda citrifolia* L.  
common in open forest  
on rough limestone
- 2 58 *Ficus prolixa* var. *subcordata* <sup>comm.</sup>  
occasional in forest on  
rough limestone
- 4 59 *Humata heterophylla*  
epiphytic on *Ficus* trunk
- 1 60 *Medinilla rosea* Gaud.  
common epiphytic and  
on coral rock, in forest.
- 15 61 *Davallia solida*  
common on trunk of large  
*Ficus*
- 8 62 *Vittaria*  
common on trunk of large
- 6 63 *Piper guianense* C. DC.  
abundant in undergrowth  
of scrub forest on limestone
- 7 64 *Morinda umbellata* var. *glandulosa*  
climbing in trees in wooded  
ravine
- 14 65 *Fagraea berteriana* var.  
in forest in ravine on limestone,  
epiphytic on dead tree,
- 6 66 *Desmanthus virgatus*  
roadside

300 m.



shrub 1 m. tall, unbranched,  
seed immature.

shrub 3 m. tall, leaves  
glossy, flowers white, fruit  
not quite mature

"lado" "young budding  
heads chewed with betel"

tree badly broken by  
typhoon. "palo nuni" "aerial  
roots cut in sections,  
boiled, water drunk as  
antipyretic"

rhizomes elongate,  
close to substrate.

piece to show trinerved  
very young leaves on  
sterile creeping branch.

rhizome closely appressed  
to substrate.

shrubs 1-1.5 m. tall  
"pupulan aniti".

300 m.



woody twiner; flowers creamy  
white, fruit turning yellowish,  
apparently yellow when ripe.

strangling shrub;  
fruits orange, glossy,  
~~badly ellipsoid~~, pointed, wrinkling when ripe.

suffrutescent herb up to 1 m.  
tall, flowers white.



July 8 - south side of  
Talofofo Bay, near mouth  
Talus of earth and  
boulders at foot of  
limestone cliffs -  
vegetation an irregular  
mixed scrub forest  
of *Leucaena*, *Triphasia*,  
*Guamia*, *Melanolepis*,  
*Pandanus tectorius*,  
*Ochrosia oppositifolia*,  
*Cordia* with a single  
large *Inisia* *Cynometra*,  
and with *Hibiscus*  
*tiliaceus* near shore,  
*Carica* in openings  
abundant ~~young~~ seedling  
*Carica* also in openings.  
Otherwise no herbaceous  
growth at all.

General height of  
forest 5-8 m.

Much rotting wood  
probably still remaining  
from Typhoon Karen. Fungi  
abundant on this.

July 8 - Asanite Bay,  
just north of Talofofo Bay  
Back of road coconut  
plantation overgrown with  
*Scaevola*, *Leucaena* and  
*Wedelia*.

Limestone cliffs back  
of that with tangled  
*Hibiscus tiliaceus*, *Mammea*  
*azorata*, *Ochrosia*, *Tournefortia*,  
*Pandanus tectorius*, *Kermadecia*,  
*P. dubius*, *Triphasia*, *Thespenia*,  
*Pipturus argenteus*,  
and, in upper parts,  
great spreading, gnarled  
twisted *Heritiera longipetiolata*.  
*Procris* abundant on  
rocks.

About 6 or 8 trees of  
*Heritiera* seen, at perhaps  
35-40 m. elevation.



36 <sup>Labels typed</sup> 1965 Marianas Is.

with  
m. Evans July 8 - north side of  
Talofofo Bay, near mouth  
46267 *Citrullus vulgaris* Schrad.  
one plant on bare roadside

same <sup>in scrub forest</sup> on talus at foot  
of limestone cliffs, ~~in scrub~~

13 68 *Melanolepis multiplandulosa*  
occasional

15 69 *Guamnia mariannensis*  
common

8 70 *Guamnia mariannensis* <sup>ae (Gaff.)</sup>  
common

14 71 *Guamnia mariannensis* <sup>ae</sup>  
common

<sup>Labels typed</sup> July 8 - Asanite Bay  
in dense tangled  
scrub forest on rough  
limestone cliffs

6 72 *Procris pedunculata*  
common on limestone ledges

15 73 *Heritiera longipetiolata* Kaneh.  
locally common

6 74 *Ficus prolixa* var. *carolinensis*  
common

5 75 *Maytenus thompsonii* (Merr.) Fob.  
occasional

3 76 *Allophylus*  
occasional

Guam

37.

45 m

25 m.

small tree 6-7 m. tall.

tree 6-7 m. tall; flowers <sup>greenish yellow</sup>  
with 3 outer petals  
spreading, somewhat  
thickened, 3 inner ones  
very thick, erect.

Merr.

tree 5 m. tall - [otherwise same]

[same as #4 (269)]

40 m.

stems fleshy,  
plant up to 50 cm. tall.  
gnarled, twisted,  
widespreading tree  
with almost no trunk

(Walt.) Fob.

low tangled shrubby  
tree; figs immature.  
scrambling shrub,  
petals white, rotate.  
depressed shrub, sterile



38 <sup>Labels typed</sup> 1965 Manana

46277 *Eugenia*

2 rare

45 78 *Heritiera longipetiolata* Karst.  
locally common

with  
m. Evans July 9 - ~~west side~~ <sup>west side</sup> NAS Agaña,  
south of Harmon Field.

7 79 *Melochia*  
common in edge of  
shrub thicket on bare coral soil

with  
29. Johnston 80 July 9 - Toto  
*Cnidocarpus urens*  
cultivated in gardens

6 81 July 10 - Agaña  
*Cordia sebastena* L.  
planted as street tree

Guam

39

low tangled shrub,  
flowers white.  
large, spreading  
gnarled, twisted tree,  
about 8 m tall, 20 m.  
across

60 m.

shrub 3 m. tall.

erect very thick-stemmed  
herb, stems with septate  
pith, lactiferous, petiole  
with lines of stinging  
hairs on upper sides;  
perianth white, salverform.  
"kadozan". leaves and  
stems cooked and eaten  
as a vegetable, stems  
peeled after cooking.  
Used especially with fish.

small tree 3-4 m. tall;  
flowering abundantly,  
corollas vermillion.



July 11 - Yona -  
 vegetable stand  
 selling  
 radishes  
 egg plants - long slender ones  
 peppers - a very narrow  
 one about 4" long.  
 yard beans.

iba - *Averrhoa bilimbi*

July 11 - Inarajan, 1 mi n.  
 edges of garden and  
 in garden itself  
*Baerhavia erecta* very  
 common; green onions in  
 garden.



Labels  
46282July 11 - about 1 mile north  
of Inarajan

46282

89

~~Boerhavia~~ erecta

abundant in garden

1 83

Cyperus kyllingia

occasional in lawn.

July 11 - Inarajan

1 84

Gardenia jasminoides

planted as an ornamental

1 85

Clerodendrum bungei

planted as ornamental

July 11 - 1 1/2 mi. west of Inarajan,  
in savanna hill

6 86

Phyllanthus saffordii

abundant

6 87

Wilstroemia elliptica

common

6 88

~~Crataegus~~ retusa

occasional

6 89

Curcuma

local around old farm,  
forming dense masses

3m

stems ascending; flowers  
pinks.

heads white

5m.

much branched shrub  
2 m tall, flowering  
abundantly; flowers  
white, turning yellowish,  
very fragrant.shrub 2 m. tall; leaves  
boetid; cymes of pink  
flowers crowded at  
top of plant.north of Umait, w. of Asdonas Hill, s. of  
Inarajan River

75m.

shrubs up to 8 m tall,

fruits dark red.

shrub 1 m. tall; flowers  
yellow.

flowers bright yellow.

rhizome bright yellow  
inside, with a pungent,  
unpleasant taste, outside  
whitish, roots thick, fleshy,  
stems erect, bracts  
rose-purple, flowers  
yellow. plant up to 2 m. tall.



44

1-Labelled  
typed

46290

3

1965 Marianas Is

July 11 - Nimitz Hill

*Asparagus sprengeri*  
planted in gardenJuly 12 - Barrigada  
*Yucca*  
planted in garden

May says this  
was brought from  
Los Angeles in 1945-46  
and planted ~~at~~  
around Com. Marianas

July 11 - 1 mile west of Marajan,

92 *Teramnus labialis*around scattered  
bushes in "latte site"  
in savanna hills.

July 11 - Marajan

93 *Panicum*occasional in low hedge  
around garden

Guam

45

many stems from  
~~at~~ base, arching,  
flowers white,  
fruit scarlet.

65 m.

several rosettes in clump,  
~~the~~ axes elongate to 3 dm.,  
scapes on two rosettes  
~~at~~ 2 m. tall, flowers  
cream white, not  
opening, tips of  
segments remaining  
approximate but loosely so,  
outer segments well  
separated, laterally.  
filaments ~~bent~~ sharply  
reflexed about  $\frac{2}{3}$  the  
way up; stigmas  
separate only at tips.

n. of Asdonas Hill  
60 m.

Twiner, fruits dry,  
from last year.

5 m.



July 13 - NAS Agaña,  
Trust Territory Compound  
46294 *Spermacoce*  
common around buildings

July 13 - NAS Agaña  
along air strips  
46295 *Lippia nodiflora* L.  
common, planted as  
ground cover.

6 96 *Lippia nodiflora* L.  
common, planted as  
ground cover

Mayo says these two forms  
differ somewhat. He is  
using them, especially  
46296, as ground cover

July 13 - NAS Agaña, Mayo  
nursery  
4 97 *Gardenia taitensis*  
planted as ornamental

3 98 *Phyllanthus*  
common weed.

65 m.

erect herb, leaves dark  
purplish green above,  
flowers very small, pinkish  
white 4-parted.

65 m.

prostrate; peduncles  
erect heads purple,  
corollas white.  
"serrate form" acc. H. Mayo,  
local nursery & landscape man.  
prostrate; peduncles  
erect; heads purple,  
corollas white.  
"entire-leaved form" acc. H. Mayo,  
local nursery and landscape man.

in extensive plantings  
in NAS Agaña. Says  
they are very aggressive,  
overcoming competition, esp. when  
mowed.

65 m.

shrub 2 m. tall, much  
branched; flowers white,  
fragrant. Introduced by H. Mayo.



July 14 -  $1\frac{1}{4}$  mi. w. of  
 Iwarajan, n. of Umabit  
 n. w. of Asdonas Hill  
 Semi-abandoned  
 plantation - with  
 coconut trees, a semi-  
 open undergrowth of  
 Glochidion, Cycas,  
 Annona muricata,  
 Hibiscus tiliaceus,  
 coconut seedlings, etc.  
 Curcuma sp. very  
 abundant, ~~up to~~  
 up to 2 m. tall, forming  
 dense patches. Urena lobata.  
 Epiphytes common  
 Davallia solida  
 Humata diversifolia  
 Belvisia mucronata  
 Pteris lanceolata  
~~some~~ Vittaria elongata  
 some Polypodium scol.  
 Asplenium sp.

July 14 -

Mayo says he has brought  
 in several small Yuccas.  
 says he brought in  
 Clerodendrum indicum  
 (big one with purple fls.).

Three plants of Mussaenda  
 Doña Aurora brought in,  
 Mayo tried to establish  
 them, one died, 2 survived,  
 if these one went to impate,  
 Mayo has other.

Clerodendrum bungei  
 brought in by Mayo 1956?

Pangola grass planted  
 by Mayo below government  
 house, controlled erosion  
 very effectively.

Calotropis gigantea  
 white form brought in  
 by a Hawaiian, but distributed  
 by Mayo.

Clerodendrum indicum  
 very showy, large clumps  
 of fls. purplish outside,  
 white inside, long stamens,  
 spreads by underground  
 runners.

Acalypha goseffiana  
 green form distr. by Mayo.

Gardenia radicans  
 grows well here but so  
 far has refused to flower.



July 14 - Inarajan

along road just back of town

46299

*Diospyros discolor* Willd.

8

doubtless planted

July 14 1 1/2 miles w. of  
Inarajan, north of  
Umafitt, ~~on~~ w. of Asdokas Hill  
near Inarajan River

46300

*Acrostichum aureum* L.

2

in ravine bottom in  
muddy soil

8

01

*Perbera dilatata* Mang.common in ravine forest  
patches

5 m.

tree 10 or more m. tall,  
~~young~~ leaves hanging  
vertically, young  
ones reddish; in bud only.

75 m.

↓

~~rhizome~~ rhizome  
procumbent, several  
cm. thick, fronds  
reclining, tangled,  
some sterile, some partly  
fertile.lactiferous shrub  
2.5 m. tall, much-branched,  
tangled. flowers white,  
somewhat fragrant;  
~~calyx~~ sepals oblong,  
unequal in width,  
petals very broadly ovate,  
eye dull orange, red  
just within, throat just  
over twice as ~~long~~ long and  
twice as thick as tube,  
strongly prismatic, with  
~~very~~ 5 strong and irregular-  
ly developed folds or flaps  
within, lengthways above  
anthers, which are at base  
of throat, ovate-ensate, acute,  
brist pendulous, immature, green speckled with whitish.



52

1965

marianas

same - in old plantation

46302

*Asplenium*

1

uncommon <sup>epiphyte</sup> on trunk of  
coconut tree

7

03

*Humata heterophylla*common, epiphytic  
on coconut and cycad trunks.

2

04

*Vittaria*common epiphyte on coconut  
and cycad trunks.~~05~~

same - in thicket

5

05

*Bauhinia*

occasional

divol? J

July 14 - Merizo (plants brought  
in by Jose Torres as  
vouchers for  
ethnomedical  
information)

2

06

*Euphorbia hirta* L.

2

07

*Phyllanthus*

Almagosa

tea made from this  
and used for fever.

Very bitter. Topping

Guam

53

80 m

stems close to ~~coconut~~  
substratum, climbing  
vertically.tufted, fronds arching,  
vertically oriented.shrub 3 m. tall, petals  
pinkish, marked with red, two  
upper ones yellowish and with  
much more red."golondrina" "boiled and  
water used for douche  
and for washing sores"Jose Torres  
"maigo lalo" "chewed by  
surajans and given to child  
for fever. Boiled, alone or  
with golondrina (*Euphorbia hirta*)  
and ~~red~~ water used for  
douche."



July 16 - saw woman  
on road near airstrip  
with skirt of *Enhalus*.

village at s. end - Magachigill  
weedy *Acalypha* "chimbury"  
"not eaten".

lowlands planted to  
coconuts, with undergrowth  
of bananas, *Codiaeum*, small  
breadfruit trees, etc.

*Polypodium scolopendria*  
very common on ground.

w of Ngavir - *Opelia*

Derikan - w. of airstrip.

*Gleichenia* savanna  
with shrubs of several  
sorts - *Acacia* *confusa*,  
*Commersonia*, *Glochidion*, *Melastoma*,  
*Macaranga*, etc.

*Nedyotis* ~~also~~ very common.

*Repenther mirabilis*

Patches of *Dirveria*.

Thol a Yol, w of Gachipar  
Mussaenda back a wach  
stem used medicinally

Gachipar - in village

Adilep Keng V.  
Hippobrama

In the central southern  
part of Yap I., southwest  
from Colonia to beyond the  
airstrip are substantial  
areas of savanna - much  
of it *Pandanus* savanna,  
with grass and especially  
sedges, much of it with  
*Gleichenia* and miscellaneous  
bushes.

Higher in hills to the  
north is forest. Forest  
in low spots is largely  
*Campnosperma*.

In the central parts  
of Tomil-Yagil are large  
areas of more extensive  
savanna, with *Myrtella*  
and typical savanna shrubs,  
much of this badly  
eroded. In the low  
areas back of the mangroves  
are forests of *Campnosperma*,  
etc. Patches of marsh  
choked with *Cyrtosperma*,  
with an occasional plant  
of *Colocasia*. *Xanthosoma*  
cultivated around  
villages. No *Alocasia* seen.



Salsela  
typedJuly 16 - ~~Towai~~<sup>Towai</sup>, west of Magachag milaround dwellings in low  
flat coconut plantation  
*Acalypha*  
rare

46308

1

July 16 - west of Ngariy

09 *Oxalis banelieri* L.

weed along path

July 16 - near pond south of

Desikan, Yap

in ~~from~~<sup>gleichenia</sup> savanna10 *Hedyotis*

very common

11 *Dimeria*

locally common

12 *Melastoma*

occasional

13 *Helicteres*

rare on roadside

July 16 - Keng Village

north of Colonia

14 *Hippobroma longiflora* (L.) G. Don

locally common on roadside bank

July 16 - Thol, or Yol, 3/4 mi.

west of Gachipar

in roadside thicket

15 *Mussaenda frondosa* L.

occasional

"chimbung", said not to be eaten.

flowers pink

erect shrub, unbranched or  
scarcely branched.  
erectlow shrub, flowers  
white.

erect; flowers lavender

"adilep" regarded as poisonous  
according to local people.shrub 2 m. tall,  
corolla bright yellow, enlarged  
calyx lobe white.  
"bach" or "wach"  
stems said to be used medicinally.



58

typed

46316

47

1945 Caroline Is

*Tristellateia australasiae* Rich.  
common

July 16 - Jachipar,  
Tomil & Gugil?  
in village

3 17 ~~Polypogon~~ *Polygala paniculata* L.  
common

1 18 *Portulaca samoensis* v. Poelln.

Yap.

59

twines climbing  
in trees; petals yellow.

1-2 m

flowers white



1965 Yap

July 17 -

Very disturbed burned over area probably formerly grassy, on small knoll soil thickly covered by "brushshot", some of it bare, with *Halorhagis*, 2 spp., *Phyllanthus*, *Salomonis*, *Polygala*, *Hyptis*, *Fimbristylis*, *g. tristachya*

*Pongium edule* - rowal

Gagil - Torril savannas in burned spots the shrubs seem to be mostly sprouting from base after being severely burned:

*Premna*  
*Scaevola*  
*Melastoma*  
*Eurya nitida*  
*Blechnum orientale*  
*Nepenthes*  
*Commersonia*  
*Gleichenia*  
*Scleria* 2 spp.

*Curculigo* coming up and flowering abundantly

## Colonia

### Cult. Plants

*Clerodendrum thomsonae*  
*Plumeria obtusa*  
*Polyscias scutellaria*  
*Alpinia purpurata*  
*Alpinia nutans*  
*Jatropha curcas*  
*Casuarina equisetifolia*  
*Cycas circinalis*  
*Cordyline fruticosa*  
(large leaved, green)  
*Clerodendrum indicum*  
*Hedychium coronarium*  
*Manihot esculenta*

*Hedyotis*, *Myrtella*,  
*Machraera*, *Spathoglottis*,  
*Rhynchospora* etc.  
all common in adjacent unburned savanna, but not seen resprouting.

*Scaevola* and *Commersonia* seedlings in burned area.

aringal - Maba

What appears to be  
*Marattia fraxinea*  
used for leis.  
"man man"



with  
M. X.  
cushingsJuly 17 - 1 mile E. of Tegeren Canal  
Tomil - Gagil  
in *Gleichenia* savanna  
on red soil

410 m.

46319

7

*Trema*

common along road

5

20

*Trema*

common along road

12

21

*Diospyros ferrea* var.  
in scrubby thicket

3

22

*Schoenus calostachyus*  
occasional

6

23

*Eurya nitida* Korth.  
common

9

24

*Myrtella bennigseniana*  
common

6

25

*Eurya nitida* Korth.  
common

1

27

*Dianella ensiformis* (L.) DC.  
rare

1

28

(grass)

in bare soil along road

1

29

*Stachytaraxis*

rare in bare soil

3

30

*Arizala*

common in burned area

shrub 1 m. tall, stems  
with unpleasant odor  
when cut; flowers pale  
green, fruit immature.  
samesmall tree or shrub 4 m.  
tall, much branched;  
fruit yellow turning reddish.  
small tufts, stems  
ascending to erect.

erect shrub 1.2 m. tall

fruit immature, <sup>to 1 m. tall</sup>  
compact shrub; flowers  
whiteerect shrub ~~1.5~~ 1.5 m. tall;  
flowers white.  
flowers blue.Twines, climbing on  
dead shrubs; bud only.



Labels  
typed

1965 Caroline Is.

July 17 - Dalipebinan Distr.  
near Yap High School, about 1/2 mi. w. of Gilam.  
w. 2. w. of Colonia

in eroded grassy savanna

46331

*Phyllanthus*

8

common on bare ground

22

32

*Salomonis cantoniensis* Low.  
occasional on bare ground

8

33

*Phyllanthus*

common on bare ground

1

34

*Polygala paniculata* L.

rare on bare ground

10

35

*Haloragis*

locally abundant in bare ground

July 16 - near pond south  
of Deriben, Yap

2

26

*Nepenthes mirabilis*occasional in  
*Gleichenia* savannaJuly 18 - same <sup>loc.</sup> as 46331.  
roadside

2

37

*Cyperus ligularis* L.

no plant seen

July 18 - <sup>Kanifay</sup> Ma'lai, <sup>village.</sup> Mun. Kanifay  
in rather dispersed village  
area shaded by coconut trees.

5

38

*Pteris tripartita*

occasional

5

39

*Marattia Angiopteris erecta* Hoffm.

rare

(to p. 68)

Yap

1/2 mi. w. of Gilam.  
30 m.

stems prostrate

flower blue

erect, leaves ~~erect~~  
closing after collection  
erect, flowers white.

erect

15 m.

flowers brick-red to  
greenish.small erect clump.  
leaves grayish green.  
concave above.

3 m

↓

rhizome about 3 cm thick, erect,  
20 cm. high, stipes erect,  
rhizome com.-like, depressed,  
stipes stipulate, fronds spreading,  
sterile, ~~pinnae~~ pinnae articulate.



Rd 4.5 mi. S. of airport  
jet.

"gari<sup>wae</sup>~~wae~~" *callicarpus*

"abachi" *Crataeva*  
fruit said to be boiled  
and eaten.

lak - *Cyrtosperma*

Mal - *Colocasia*  
thot - breadfruit

pan - banana  
("denai" in Tamil garil)

pan also is squash or pumpkin  
"pan ngigamaman"

"guregun" = orange

*Peperomia pellucida*  
boiled & water used for  
boils.

ammug<sup>ch</sup> - *Pep. pellucida*

kiai = *Taeniophyllum*  
(spider, or octopus)

Pteris - *Tiliber*

renq - *Bixa*

len - *Antrophyum*

got or gor - *Polypodium* scot.

---

Mr. Jim Boykin says  
that on Yap a very  
competent local  
authority on medicinal  
plants is a woman  
named Tinan  
in Gachipar



Salisbury  
68

1965

Caroline Is.

7 m  
↓

46340

*Callicarpa candicans* (Burm. f.) Hochs.  
occasional on old rock platform

5a

41

*Phyllanthus*  
common locally in  
slightly open places.

2

42

*Crataeva speciosa* Volk.  
common under story tree

41

43

*Peperomia pellucida* HBK.  
common <sup>on mossy</sup> rocks

46

44

*Pilea microphylla* L.  
abundant on large rocks

1

45

*Hedyotis biflora* (L.) Lam.  
occasional on large rocks

61

46

*Ormosia*?  
common, planted for  
hedges

62

47

*Pteris quadriaurita* L.  
common generally, terrestrial

2

48

*Taeniophyllum*  
occasional on mossy tree-trunks

yap

69

small shrub, flowers  
white. "gariwaea"

with an unpleasant stale odor when wilted,

Tree 5 m. tall, buds wide  
open from first, petals  
white, turning yellow,  
stamens narrow;  
fruits (on another tree) strongly  
speckled with white, pendent,  
varying in cross-section  
from round to square or  
somewhat ~~more~~ oblong.  
"abich" fruit said to be  
boiled and eaten, to have  
been much consumed  
especially after World War II.  
stems fleshy; plant  
said to be boiled and  
water used in treatment  
of boils. "amuck"  
stems fleshy, prostrate  
to erect.  
flowers white, corolla  
tube inflated.  
small tree to 4 m. tall;  
flowers dull whitish  
lined with brown.  
rhizome horizontal, short,  
thickly covered by roots  
and fronds. "tilibu"  
roots flat, closely adhering  
to bark; fruit immature.  
"k'ai" (meaning spider or octopus.)



70 <sup>Labels typed</sup> 1965 Caroline Is.

46349 *Callicarpa candicans* (Burm.f.) Hochr.

uncommon

50 *Digitaria*

very local, on large mossy rocks.

51 *Bixa orellana* L.

occasional

52 *Antrophyum reticulatum*

locally common.

epiphytic on tree-trunks.

53 *Psilotum nudum* (L.) Beauv.

rare, epiphytic on tree trunks.

54 *Dendrobium*?

rare, epiphytic on tree trunks

55 *Polypodium scolopendria*

abundant, terrestrial

56 *Nephrolepis biserrata* (Sw.) Schuy.

occasional, on rock

57 *Passiflora edulis* Sims

planted

Yap

71

erect shrub, flowers

pink.

delicate, decumbent to erect.

sterile shrubs 2-3 m tall

"reng"

"levn"

flowers orange.

rhizome horizontal, creeping extensively. fronds erect (soi in some eaten by small caterpillars), "gob" or "gor"

fronds erect

vine, bud only. said to have been brought in by agriculture dept. to supply vitamins.



July ~~19~~<sup>19</sup> - left Yap on  
M.S. Rogue at about 6:30  
weather completely  
overcast and rainy.

July 20

Off Ulithi at 7 am.  
Anchored Moqmoq I. 8:50.

From lagoon Moqmoq  
appears covered from end  
to end with coconuts  
except for short sand-<sup>on spits</sup>  
An understory of other  
trees shows here and  
there. Several boat-houses  
here and there along lagoon  
shore. No large  
breadfruit trees emergent  
above coconut canopy.  
Herbaceous vegetation  
on sand spits. Many  
young coconut trees under  
older ones along lagoon  
shore.

A small bare sandbar  
100 m. or so east of Moqmoq  
on reef.

Moqmoq I.

Spermaceae suff. - "youwal"

Morinda citr. "lol"  
Callicarpa "katar"

fruit eaten when dead ripe.  
used medicinally  
also trunk used for building  
(on Yap leaves heated and  
applied for backache)

Muntingia int. during  
war. fruit eaten

Carica - "pahaya"

Zoysia tenuifolia  
int. during German & Jap. time.

Cinnam. - machia

sweet potato "kamote"

Phyllanthus "harnasod pipi"

Pseuderanthemum atrop.  
int. during Jap. time

Musa sp. "inch"

Cassia ac. "haialeng"  
leaves used for leis.

Catharanthus "intul ep sets"  
int. during Jap. time

Crataeva "iabush"



Procravia - "youwal"

Mertensia tab. - "lobaco"

Plumera

Artemisia "iarbwas"  
lvs. used for leis because  
of odor. also  
medicinally.

Premna "iai"  
fls. & young lvs for  
leis, also medicinally

Isora caser - "hachio"  
fls for leis.

Asclepias "koe"  
int. part. time  
name from another pl. with similar  
lvs.  
moss

Citrus lemons

Artocarpus "mai"  
coll. seedless "mafoi"  
cylindric, low pyramid

Cyperus jav. "paitil"  
bulb

Art. maurian. "mamol"

Blechnum - "youwal"

Chrysopogon -  
int. part. time

all grasses - "fadel"

Pilea "lum"

Alocasia "feleh"  
stem eaten

sugar cane "makel"

Ocimum "oranga"

Hybanthus "floras"  
int. part. time

Ficus tinctoria "howal"  
used for medicine  
fruit eaten.

Plumeria rubra - "soul"  
brought in Spanish time.

Uwas  
Francis - informant

posts of boat houses  
of coconut trunks, & other  
logs. perhaps not grown here.



with  
M. EvansJuly 20 - Moymoy Islet,  
around dwellings in  
village, shaded by coconut palms.46358 *Spermacoce supputescens* Jacq.  
locally common+ 59 ~~cat~~1 59 *Callicarpa candicans* (Baum. f.) Hochr.  
occasional61 60 *Muntingia calabura* L.  
occasional83 61 *Zoysia tenuifolia* Trin.  
forming dense carpets  
locally, very abundant61 62 *Phyllanthus*  
locally common71 63 *Cassia occidentalis* L.  
locally common61 64 *Catharanthus roseus* (L.) G. Don  
locally common31 65 *Xylocarpus batatas* (L.) Poir.  
planted61 66 *Crataeva speciosa* Volk.  
common understory tree1 67 *Boerhavia repens* L.  
occasional61 68 *Artemisia vulgaris* L.  
very local

(to p. 82)

Informant

Francis Uwas

1-2 m.

plant purplish, corolla white.  
"yowal" (name applied to  
several small plants.)  
sprouts, sterile. "katar"  
(2 informants)small tree, 4 m. tall, flowers  
white. said to have been  
introduced during war.  
fruit said to be eaten.  
introduced during Japanese  
time.

"hamasol pipi"

flowers yellow "kaialeng"  
(2 informants)  
leaves used for leis.  
dwarf shrub, flowers magenta.  
(white flowers from aly her)  
"inthal ep sets"  
creeper. "hamoté"tree 4-5 m. tall, petals  
white, turning yellow.  
stamens reddish "iabuch"  
"fruit eaten". "abuch" (another informant)  
prostrate, leaves white  
beneath. "yowal" (name  
used for several small plants.  
aromatic herb, "iarbwar"  
used for leis because of odor,  
also medicinally.fruit  
eaten  
cooked & raw



1965 Caroline Is  
July 20 <sup>Asor</sup> ~~Asor~~ Islet

Spermacoce

Eleusine

Tridax

Centella

Euphorbia corollifolia

Lippia nodiflora

Calophyllum

Tacca

Hymenocallis

Premna "ias"

used to make lei

Euphorbia sp. "abuliang"  
used for lei

Hymenocallis "wachung"  
fls used for lei

Centella

Portulaca oleracea "haqui"  
boiled with sugar and eaten

Panicum ambiguum

Plumeria rubra

Araneaia excelsa

Hibiscus tiliaceus

Lepturus "baten"

Vigna "holu"

Mammea "devoes"

McClodria "aroma"

Nerthi atoll

Lippia form. large  
mat. Tridax abundant

Carica - "papaia"

Cassytha - "holu"  
whole plant eaten by children

Wedelia "yat yut"

Tacca mog mog  
"mohumoh"

Terminalia sp. "kil"

Polypod. scol. "chi chi"

Nephrolepis - "mara"

Plumeria "soeni"  
used for lei

Alocasia "filch"

Pipturus "aroma"  
berry eater, very sweet

Xanthosoma violaceum "yoi"

Cucurbita sp. "kalavai"

Flouya red, "aroma"



*Eugenia "pariapi"*  
fruit eaten when ripe  
red when ripe.

*Ficus tinet*. "howan"  
(Woleai)

The village is shaded by coconut trees, with scattered breadfruit, with a few *Crataeva*, *Musa*, *Hibiscus*, *tiliaceus*, *Carica*, etc. as a very irregular, very open understory. Eastward from the village the coconut plantation continues, with a much denser understory of *Premna*, *Hibiscus*, *Pipturus*, *Melochia*, *Artocarpus*, *Musa*, *Carica*, *Terminalia samoensis*, *Ficus tinctoria*, *Eugenia* sp. etc. *Polypodium*, *Alocasia*, ~~and some~~ *Nephrolepis*, and many weeds cover the ground, especially near paths, where *Euphorbia*, *Wedelia*, *Vigna*, *Physalis* sp., *Eleusine*, and other grasses become abundant. *Cassytha* is

On the trails, as well as in the village, *Zoysia*, *Lepidochloa nodiflora*, and *Centella* form mats.

very  
common.  
green

In small clearings sweet potatoes are planted also *Alocasia* and *Xanthosoma violacea*. This is the first place where I have seen *Alocasia* planted and tended - spaced plants in small depressions with weeds pulled out.

Common food plants seen are

*Cocos nucifera*  
*Ipomoea batatas*  
*Carica papaya*  
*Musa sapientum*  
*Crataeva speciosa*  
*Artocarpus altilis*  
*Artocarpus mariannensis*  
*Alocasia macrorrhiza*  
*Xanthosoma violacea*  
*Saccharum officinarum*  
*Eugenia* sp.  
*Ficus tinctoria*  
*Cucurbita maxima*



Salisbury typed 1965 Caroline Is.

82

46369 *Aselepias curassavica* L.  
very local

61 70 *Isua casei* Hance.  
local

2 71 (moss)  
local, on coral sand soil.  
3 72 *Artocarpus altilis* (Park.) Forb.  
common

3 73 *Citrus*  
planted

6 74 *Cyperus javanicus* Houtt.  
common

3 75 *Artocarpus mariannensis* Tree.  
occasional

72+76 *Chrysopogon aciculatus* (Retz.) Trin.  
local

81+77 *Blechnum brownii* f. *puberula* Lam.  
occasional

81+78 *Vernonia cinerea* var. *parviflora* (Bl.) DC.  
occasional

2 79 *Pilea microphylla* L.  
common

3 -80 *Eleusine indica* (L.) Gaertn.  
common

another informant  
said "mangaitu"

"mai" general  
term for breadfruit  
tree - informant

Ulithi Atoll

83

herb 1 m tall, flowers with  
red corolla, yellow center,  
"ko'e" ~~so named~~ - intro-  
duced in Japanese time,  
so named because of  
another plant with  
same shaped leaves,  
with this name,  
shrub 2 m. tall, flowers  
scarlet. "hachio" (informant)  
flowers used for lei.  
"lum"

tree 6 m. tall (others  
much larger), lactiferous,  
young fruit cylindric,  
dishes low-conic,  
"mai mafoi" seedless.

small tree, sterile,  
strong lemon-scent  
gray-green, in tufts.  
"fa'il hulis"

large tree. "mamol"  
fruits seedy

creeping, fruiting culms  
erect. Introduced in  
Japanese time. "fadet" (= grass)

fls. purplish.

"lum"



Salween typed 1965 Caroline Is.

84

46381  
#1

*Alocasia macrorrhiza* (L.) Schott  
occasional (planted,  
at least on Asor Islet)

2 82

*Cyperus byllingii* Endl.  
rare

#1 83

*Ocimum sanctum* L.  
occasional, planted

#1 84

*Hibiscus rosa-sinensis* x *schizopetalus*?  
planted

1 85

*Ficus tinctoria* Forst.  
rare here

#1+86  
Fo-

*Eragrostis Tenella*<sup>a</sup> (L.) Beauv.  
occasional

with  
M. Evans  
(date 4/6/87)

July 20 - ~~Asor~~ Islet  
on coral soil around  
building in village

#1+87  
Fo

*Centella asiatica* (L.) Urb.  
common

#3+88

*Lippia nodiflora* L.  
very common, (but not  
seen on Moq Moq I.)

#1+89  
Fo

*Tridax procumbens* L.  
common to abundant  
locally

1 90

*Emilia sonchifolia* (L.) DC.  
occasional

#1+91

*Euphorbia cyathophora* Muar.  
common locally

#1 92

*Stachytarpheta jamaicensis* (L.) Vahl  
occasional

#2 93

*Dentella repens* Forst.  
locally common

Ulithi atoll

85

caulescent. "feleh"  
stem ~~ss~~ cooked and eaten.  
(2 informants)

heads white

aromatic herb. "darang"<sup>tr</sup>

shrub; flowers red, white,  
'floras'

sterile shrub "howal"  
used medicinally,  
fruit eaten. (2 informants)

creeping

creeping, forming mats,  
flowers white.

rays white.

heads purple

erect, base of bract red.  
"abuliang" used for leis.  
flowers light blue

very prostrate, flowers white.



Labels typed 1965 Caroline Is.

86

46394 *Panicum ambiguum* Trin.  
common

41 95 *Portulaca ~~lutea~~ oleracea*  
common

43 96 *Cyperus compressus* L.  
very local

61 97 *Euphorbia hirta* L.  
locally common

52 98 *Lepturus repens* var.  
local

1 99 *Vigna ~~torta~~ marina* (Burm.) Merr.  
common

46400 *Alysicarpus*  
rare, one small mat  
seen.

3 + 01 *Mammea odorata* (Raf.) Kost.  
rare

2 + 02 *Carica papaya* L.  
very common

6 03 *Wedelia ~~biflora~~ Melochia*  
~~respirans~~ ~~fruticosa~~ ~~occasional~~

same - in weedy  
coconut grove in  
interior of islet.

3 04 *Premna obtusifolia* R.Br.  
very common

Ulithi atoll

87

culms procumbent

fleshy, brownish green.  
"hagus" boiled with  
sugar and eaten

very ~~tree~~ tufted, culms  
spreading.

leaves rather glaucous,  
plant decumbent. "fatei"  
creeping vine, flowers  
yellow. "holu"  
prostrate, flowers  
flesh-color.

specimens from sterile  
sprouts & seedlings, tree  
5 m. tall but apparently  
still battered by  
Typhoon, almost leafless.  
"devoe"

small soft-stemmed  
tree. "papaya" "pawia"  
~~spreading herbaceous~~  
heads yellow. "yat spot"  
shrub 3 m. tall, petals crimson  
white distally. "aroma"

shrub, flowers green "iai"



Labels 1965 Caroline Is.

88

46405

*Cassytha filiformis* L.  
common, parasitic on  
many other plants.

2 + 06 *Terminalia samoensis* Rech.  
occasional

3 07 *Melochia*  
occasional

6 + 08 *Wedelia biflora* (L.) DC.  
very common.

9 09 *Nephrolepis biserrata*  
occasional, growing on  
pile of rotting coconut husks

6 + 10 *Polypodium scolopendria*  
very common

3 + 11 *Hymenocallis littoralis* (Jacq.)  
planted Salisb.

1 12 *Pipturus argenteus*  
occasional

1 + 13 *Fleurbaeya ruderalis*  
locally common

2 14 *Xanthosoma violaceum*  
planted

15 *Achyranthes*  
very local

Ulithi atoll

89

leafless vine, stems  
very green (sap at all yellow)  
flowers white, fruit immature.  
"holu" whole plant  
eaten by children

shrub, fruit immature  
"kil"

shrub 3 m. tall  
flowers crimson, white  
distally, fruit immature  
sprawling extensive  
herb, resinous odor;

"yat-yut"  
fronds erect. "mara"

fronds erect from prostrate  
creeping rhizome, fronds  
mostly much larger  
than entire frond on specimen.  
leaves distichous, basal,  
scapes 1.5 m. high, ~~with~~  
compressed somewhat,  
edges sharp. flowers  
white. "washing" flowers  
used for leis. most inflorescences  
have some flowers broken off.

shrub, sterile. "aroma"  
berries eaten, said to be very sweet.  
stems <sup>red</sup> fleshy. "aroma"

petioles and veins <sup>dark</sup> purple,  
leaves glaucous. "yos"

"washing"  
all another  
informant.



Salute 1965 Caroline Is.

90

46416

5+

*Fleurya ruderalis*  
very local

4 17

*Physalis*  
common

5 18

*Solanum nigrum* L.  
occasional

6 19

*Phyllanthus amarus*?  
common

6 20

*Eugenia*  
rare

4 21

*Achyranthes*  
locally common

22

*Physalis*  
locally common

1 23

*Phyllanthus*  
rare, one plant seen

6 24

*Acalypha*  
rare

4 25

*Borhavia* cf. *mutabilis* R.Br.  
rare

1 + 26

*Dactyloctenium aegyptium* (L.) Willd.  
local

1 27

*Conyza canadensis* v. *pusilla* (Nutt.) Cronq.  
local along trail

31 + 28

*Tacca leontopetaloides* (L.) O.Ktze.  
locally common

70 29

*Ficus tinctoria* Forst.  
occasional

43 30

*Eleusine*?  
very local

4 31

*Digitaria*  
very local

Ulithi atoll

91

1-2 m

stems green, "aroma" fleshy.

flowers with central area brown, tips of lobes yellow-green  
flowers white, ripe fruits black.

"parrot" fruit red when ripe, eaten.

tree 6 m. tall, some tendency to cauliflory, stamens whitish  
herbs up to 1 m. tall.

erect shrub

erect

prostrate, leaves white beneath, flowers pinkish.

culms spreading & ascending.

sterile

scapes almost 2 m. tall, leaves very complex, 6 dm. ± across. "mogmog"

shrub 2 m. tall, fruit immature "howan".

erect.

culms ascending.



- 46432 *Cenchrus brownii* R. & G.  
common very locally
- 4233 *Euphorbia glomerifera* (Millsp.) Wheeler  
common in open cultivated area, clearing.
- 61+34 *Physalis angulata* L.  
common in open cultivated clearing
- 3 +35 same - in village  
*Casuarina equisetifolia* L.  
planted

July 21 - <sup>Ason</sup> ~~Ason~~ Islet  
on the lagoon side of  
a high lagoon beach ridge

- 6436 *Euphorbia charnissensis* (Kl. & G.) Boiss.  
common in sand at top of beach
- 36 +37 *Pemphis asidula* Forst.  
rare on coarse gravel
- 6 +38 *Ipomoea pes-caprae* subsp. *bariliensis* (L.) v. Oostb.  
abundant in full sun
- 4 39 *Euphorbia charnissensis* (Kl. & G.) Boiss.  
common
- 3 +40 *Polypodium scolopendria*  
common
- 54 +41 *Triumfetta procumbens* Forst. f.  
abundant, forming mat.  
~~with the creeper~~
- 2 42 *Pandanus tectorius* Park.  
occasional near top of ridge
- 1 43 *Emilia sonchifolia* (L.) DC.  
rare

culms decumbent at  
base, ascending.

erect, tips arching.

"pangkeng" much branched herb  
1.8 m. tall; flowers  
greenish yellow with  
greenish & brownish center.  
small tree 4 m. tall.

1-2 m.

prostrate; leaves white  
beneath.

shrub 1 m. tall, rather  
spreading; flowers white.  
prostrate creeper, elongate  
to some meters; flowers  
deep rose purple.

spreading dwarf-shrub;  
leaves white beneath

fronds erect from prostrate  
rhizome.

extensive prostrate creeper,  
flowers yellow.

small tree with prof. roots,  
4 m. tall; fruits from ground beneath.  
flowers purple.



46444 *Scaevola taccada* (Gaertn.) Romb.  
occasional on top of ridge

45 *Tournefortia argentea* L.f.  
common

46 *Pisonia grandis* R.Br.  
near top of ridge, local

47 *Morinda citrifolia* L.  
common, near top of ridge

48 *Pipturus argenteus*  
very common, locally  
forming main component of scrub

49 *Triumfetta procumbens* Forst.f.  
common, forming thick  
mat with other creepers

50 *Barringtonia asiatica* (L.) Kunz  
rare on top of ridge

same - inner part of  
east end of islet

51 *Thuarea involuta* (Forst.f.) R. & S.  
common locally

52 *Hibiscus tiliaceus* L.  
occasional in thickets

53 *Leucaena leucocephala* (Lam.) de Wit  
rare, a few seedlings only seen  
in clearing.

54 *Euphorbia cyathophora* Mun.  
occasional, with red form.

shrub 1.5 m. tall; "lad"  
corolla lobes edged  
with purple, otherwise white.  
shrub 2.5 m. tall; leaves  
fleshy, frosty green; flowers  
white, in all stages of  
from bud to young fruit  
in different cyms. "chel"  
small tree, sterile.

shrub 3 m. tall, flowers  
white, fruit in all  
stages. "lol" <sup>fruit eaten like with sugar.</sup>  
shrub 1.5 m. tall, spreading;  
leaves greenish white beneath;  
ripe fruiting receptacle  
white, soft-fleshy.  
prostrate with  
ascending branches;  
flowers yellow.  
sterile small tree.

prostrate, forming a loose  
mat.

small tree leaves  
pale beneath. "kulifon"  
unbranched seedling 0.7 m. tall

herb 0.7 m. tall; base of  
bracts white.



1965 Caroline Is.

46455  
1 Fo +

*Sporobolus tuba* (Schlecht.) Don  
occasional

2 56

*Melochia*

very common in thickets  
on sharp gravel

82 + 57  
Fo, Herb

*Flourensia ruderalis*  
common on sharp coral gravel

same - on seaward  
beach ridge

43 58

*Hedyotis albida-punctata* (Merr.) Forb.  
small colony on  
rocks on inner slope

83 59

*Callicarpa candicans* (Burm. f.) Hochs.  
common in scrub

81 + 60  
Fo

*Canavalia cathartica* Thou.  
common in thickets

1 + 61  
Fo

*Guettarda speciosa* L.  
rather rare

same - in forest well  
in from outer beach

53 + 62

*Pippia nodiflora* (L.) Rich.  
local

1 63

*Fimbristylis cymosa* R. Br.

rare in thick herbaceous  
vegetation under coconuts.

3 + 64

*Portulaca samoensis* v. Poelln.

in cultivated clearing, common.

2 65

*Cyperus javanicus* ??  
rare in clearing

Ulithi Atoll

sterile twines

shrub 1.5 m. tall,  
flowers with red center,  
white distally.  
petals  
bushy herb, stems fleshy,  
bright red.

Plant ~~fleshy~~ spreading,  
leaves thinly fleshy;  
corolla white.

shrub 2 m. tall; leaves  
white beneath; flowers rose pink.  
twines; corolla magenta-pink.

shrub 2 m. tall; flowers white,  
with rather rancid odor.

stems decumbent to  
strongly ascending,  
flowers white. said to have  
come in during World War II.

prostrate, fleshy, flowers  
yellow.



Labels  
typed

46466

same - in gardens  
around dwellings in village  
*Citrus aurantifolia* (Christm.)  
rare <sup>twingle</sup>

1 + 67

*Nicotiana glauca* L.  
occasional

1 + 68

*Plumeria rubra* L.  
occasional

1 69

*Dioscorea*  
occasional

2 + 70

*Calophyllum inophyllum* L.  
rare

2 + 71

*Cucurbita maxima*  
common

1 72

*Polyscias fruticosa* (L.) Hamme  
planted as hedge

1 + 73

*Pseuderanthemum carmichaelii*  
var. *atropurpureum* (Bull.) Forb.  
planted

1 74

*Inocarpus fagifera* (Parks.) Forb.  
planted

2 75

*Psidium guajava* L.  
planted, we seen

1 + 76

*Mirabilis jalapa* L.  
planted

1 77

*Tagetes*  
planted

1 + 78

*Manihot esculenta* Crantz  
planted

shrub 1.5 m. tall, sterile.

herb 1 m. tall, sterile.

shrub 1.5 m. tall. sap  
milky, stems 2 cm. thick.  
small twines, stems  
narrowly clad; sterile  
small tree; sterile.

extensive vine; leaves  
gray-spotted; flowers  
orange, fruit with somewhat  
narrower neck, but  
straight, pedicel <sup>slender</sup> suddenly  
expanding to 2-3 times its  
diameter where it attached  
to fruit. "calawas"

shrub to 1 m. tall,  
aromatic; sterile.

shrub 2 m. tall; leaves  
dark maroon; sterile

small tree, somewhat  
yellowish green; sterile.  
much branched spreading  
shrub.

~~flowers~~ much-branched  
herb; flowers crimson.

herb 0.4 m. tall, with very  
strong disagreeable odor, flowers orange.  
shrub 2 m. tall; leaves very  
yellowish green, sterile.



~~Asor~~ Islet. - east end is surrounded by a very high boulder ridge, certainly in places up to 6 m high, at least.

In places on both lagoons and seaward beaches the slopes of the ridge are bare and black - in other places covered by a mat of vegetation or thickets.

### east side

~~Middle~~ of lagoon - Two ~~small~~ tiny islets on separate scraps of reef. the northern one apparently gravel, with some debris accumulated on it but no plants visible.

mar?

The southern one is mostly sand, built up at least 1-2 m., some gravel at ends, has a small grove of *Journefortia* with 2 taller coconuts emergent from it, 2 coconut seedlings on the sand platform which is much larger than the *Journefortia* grove.

Page 9.

July 22 - Falalap Islet

West end has high sand dunes on south side, probably 8 m.

*Cassytha* used as baby food - mother chews it up for baby. "ilul" (Gelin) "ulul" according to informants

*Calophyllum* - "fitor" -

*Premna* "iai"

wood for canoe paddle

on south side, at least, the beaches are sandy. Two broad but short series of beach rocks on south side.

Air strip, asphalted, across west end from n.e. to s.w.

*Cyrtosperma* pits with some *Colocasia*; ~~passies~~ *Ludwigia octovalvis*, *Edinocodon*, *Alternanthera*, *Ceratopteris*, etc.

A bristle-thighed curlew in open area.

A brown booby, almost black <sup>flew by</sup> already a breed

A flock of common noddies fishing near second islet, 500 m or more, circling very close to water; several others flying in pairs over the lagoon farther away.



102

1965

Caroline Is.

Labels  
typed46479  
x 1

July 22 - <sup>Asor</sup>~~Asor~~ Islet  
on sand just back of  
*Cenchrus echinatus* L.  
common

x 3 80

*Pluchea indica* (L.) Less.  
very local

1 + 81

July 22 - Talalap Islet  
high sand dunes  
*Cassytha filiformis* L.  
generally common, slopes of

3 1 82

*Lepturus repens* var. *repens*  
rare on top of

4 1 83

*Caesalpinia bonduca* (L.) Roxb.  
no plant seen on slope of

same - in open or partly  
open ground around  
former Coast Guard Station,  
now High School.

x 2 84

*Lepidium virginicum* L.  
locally common

x 1 85

*Amaranthus viridis* L.  
occasional

x 3 86

*Euphorbia thymifolia* L.  
very local

1 87

*Euphorbia chamaecyparissias* L.  
very local

Ulithi Atoll

103

1-2 77

beach

culms caespitose, spreading,  
decumbent, slightly  
ascending.

low shrubs 0.8 m. tall,  
heads purplish ~~at~~ pink  
at anthesis.

green leafless vine,  
flowers white, fruit immature  
"ilul" or "ulul" juice  
and chewed plant fed  
to babies, chewed first  
by mothers.

long stolons

sterile vine.

plants badly trampled

prostrate, grayish green

prostrate, stems red,  
leaves green.



Jan 1965 Caroline Is.

104 typed

46488 *Heliotropium ovalifolium* <sup>procumbens</sup> v. *depressum* (Cham.) <sup>Fr. & S.</sup> ~~Wren~~

rare, ~~near airstrip~~

89 *Saccharum officinarum* L.  
very rare, planted

82+90 *Chrysopogon aciculatus* (Retz.) Trin.  
local around buildings

61 91 *Lida rhombifolia* L.  
common in roads and paths

31 92 *Ficus tinctoria* Forst  
occasional in thickets

94+93 *Desmodium canum*  
abundant along paths  
and as a lawn around  
buildings

same - in rather low  
moist ground near  
airstrip

3 94 *Ischaemum*?  
abundant

4 95 *Conyza canadensis* var. *pusilla* (Nutt.) Cronq.  
occasional, very local

12 96 *Lepturus repens*  
rare in meadow of *Paspalum distichum*

10 97 *Paspalum distichum* L.  
abundant, dominant in large areas

44 98 *Pennisetum*  
common

4 99 *Pennisetum*  
common

Ulithi atoll.

105

flowers white

canes 1 m. tall. "makil"

prostrate, scapes erect.

flowers orange.

shrub 3-4 m. tall, fruit  
pale green.

prostrate to erect,  
flowers dull reddish.

prostrate, tips ascending,  
all seen sterile.

branches from a large  
fasciated plant  
1 m. tall, (all seen fasciated),  
heads white.

stems prostrate  
stems, erect branches.  
clumps 2 m. tall.

same as #46498 but certain  
clumps with ~~most~~ spike  
viviparous.



Labels  
106 typed 1965 Caroline Is.

46500 Cyperus iris?  
7 very common

same - in Taro <sup>pita</sup> marsh  
2 01 Ceratopteris thalictroides  
occasional, submerged

83 02 Alternanthera repens  
occasional in mud  
53 03 Echinochloa crus-galli  
occasional

2 + 04 Bidens pilosa L.  
2 plants seen on bank of  
2 05 Colocasia esculenta (L.) Schott.  
common planted

2 06 Cyrtosperma chamissonis  
abundant, planted

07 ~~Ludwigia~~  
43407 Ludwigia octovalvis (Jacq.)  
common

46502A Eclipta alba (L.) Hassk.

I, Echin, Ulithian teacher,  
says that there are 5 inhabited  
islets in Ulithi - Falalap,  
Asor, Moqmoq, Fassera and  
Soto (next to Fassera), people  
go to other islets to make  
copra, sometimes stay for  
a while.

The two small atolls east  
of Ulithi are uninhabited  
but belong to Ulithi, where  
people go there to harvest  
copra.

Ulithi Atoll

107

very small tufts, or isolated  
culms, erect or ascending.

elongate creper, head  
whitish  
erect, culms solitary.

blade pointing downward,  
glaucous beneath, "yoth"  
other plants much  
larger; blades erect,  
green.  
branched suffrutescent  
herb 2 m. tall, buds  
yellow.

July 24 - anchored inside  
east entrance to lagoon,  
no chance to get ashore.  
Left for Yap at 10 p.m.  
to get radio repaired.  
Arrived Yap 1:30 p.m.  
July 25. Rained hard  
in afternoon.  
This week has been  
abnormally rainy both in  
Ulithi and Yap.



Local  
typical

46508

41 AH

July 24 - Dalupebinaw Distr.

near Yap High School, gitam

*Clerodendrum inerme* (L.) Gaertn.

occasional in sparse  
brush along road

July 25 - outskirts of Colonia  
around dwellings

and garden patches

2 09 *Lantana camara* var. *aculeata* (L.) Merr. 10-15 m.  
rare in thicket

2 10 *Hedychium coronarium* Koen.  
locally common in wet ground

1 11 *Psidium guajava* L.  
occasional

1 12 *Pachyrhizus erosus* (L.) Urb.  
~~one~~ one plant seen

2 13 *Alpinia nutans* (Andr.) Roscoe  
planted

July 25 - ridge above Niman,  
n.n.w. of Colonia

in thickets and grassy slopes

2 14 *Polypodium scolopendria* Burm. f.  
common

3 15 *Fimbristylis tristachya* R.Br.  
common

2 16 *Paspalum orbiculare* Forst.  
occasional

(to p. 112)

spawling sparsely  
branched shrub, buds  
pinkish tinged, stamens  
narrow.

10-15 m. ~~flower~~ slender shrub 2  
m. tall; flowers orange-red.  
rank herb 1 m. tall; flowers  
white, deliciously fragrant.  
shrub 3 m. tall, much  
branched.  
sterile vine climbing  
in tree.  
2 m. rank herb, many  
stemmed from base;  
calyx & corolla white  
shading to pink distally,  
stamens red with  
deep yellow margins.

130 m.

↓

caespitose; upper part of  
spikelet flowering, lower part mature.  
caespitose.



July 25 - rain, though  
not hard, all morning.

On road bet. high school  
and Colonia is a coconut  
with spicate inflorescence.  
Said to be another somewhere  
on island.

Trail from Nimar up to  
beacon on way to Mt.  
Matade starts in  
gardens and taro patches  
around houses, with  
breadfruit and mangs  
trees, clumps of bamboos,  
etc. A short distance  
up there are open grassy  
slopes and thickets.

*Cerbera mangas*  
common - corolla tube  
gradually dilated into  
throat, no abrupt  
division, throat not  
plicate within, fruits  
usually single, occa-  
sionally double, red  
when ripe, pendent,  
eye of flower brick red.

Grassland all the  
way to beacon being  
more or less rapidly  
invaded by shrubs  
and trees. The following  
were seen in grassland

gap

(not including thickets  
and forest patches  
in ravines) -

*Glochidion*

*Melastoma*

*Macaranga*

*Pterocarpus* or *Pongamia*

*Mangifera indica*

*Calophyllum inophyllum*

\* *Scaevola*

\* *Clerodendrum inerme*

*Hibiscus tiliaceus*

\* *Wedelia biflora*

*Premna obtusifolia*

*Ormosia*?

*Pandanus tectorius*

\* ordinarily strand species.

The top of the hill is  
marshy, cut by channels  
~~and~~ into hummocks,  
with deep tangle of  
*Fimbristylis* spp., *Scleria*,  
*Ischaemum*, and especially  
*Andropogon* (?), some  
*Triplaris umbellata*.

Patch of forest dominated  
by *Garcinia* (?), which  
has slender trunks 10-15 cm  
dbh, wide-spreading prop roots  
in lower 3-4 dm, reproducing  
abundantly in sun shade. Also  
*Ipomoea* and *Psychotria* in undergrowth  
of *Garcinia* saplings.



Salisbury typed 1965 Caroline Is.

112

(from p. 108)

46517 *Fimbristylis*

occasional among grass

47 18 *Ixora casei* Hance

common in thickets

~~19 *Acetyphaea*~~

6 19 *Macaranga carolinensis*

common, invading  
grassland

5 20 *Rhus*

common in thickets

86 21 *Ischaemum*

common in grassland

64 22 *Andropogon?*

dominant in grassland

1 23 *Fimbristylis*

occasional in grassland

42 24 *Diospyros ferrea* var.

in thickets

62 25 *Hibiscus tiliaceus* L.

~~large~~ common in thickets

July 25 - Kima in

outskirts of Colonia

along trail in wet ground

4 26 *Lindernia antipoda* (L.) Ait.

common

86 27 *Ludwigia hyssopifolia* (G. Don) Exell

very common

yap

113

120 m

shrub 2.5 m. tall; flowers  
scarlet.

shrub 2 m. tall.

40 m.

small tree about 5 m.

tall, spreading, fruit black.

60 m.

trailing stems, inflorescence  
ascending.

↓

tangled culms, fruiting  
over erect or ascending.

large shrub, 4 m. tall,  
diffusely branched;  
this plant extreme in  
smallness of leaves + fruit.

30 m

↓

flowers light purple  
or mauve.

erect, flowers yellow.



July 26 - upper slopes  
of hill north of Nimas,  
h. n. w. of Colonia  
in dense patch of low forest

- 46528 *Melochia*  
edges of  
6 29 *Melochia*  
edges of  
84 30 *Macaranga carolinensis*  
common in edges of  
3 31 *Ixora triantha* Volk.  
occasional in undergrowth  
3 32 (guttif.) *Garcinia*  
dominant in  
seedlings abundant.  
4 33 *Trichomanes*  
on tree-trunk  
1 34 *Psychotria*  
common in undergrowth  
43 35 *Psychotria*  
same  
3 36 *Psychotria*  
same  
4 37 *Psychotria*  
same

July 26 - same, top of hill  
in shrubby grassland  
surrounded by thickets

- 1 38 *Spathoglottis*  
occasional, terrestrial  
1 39 *Spathoglottis*  
occasional, terrestrial

150 m.



shrub 4 m. tall, flowers  
bright pink.  
shrub 3 m. tall,  
flowers white.  
small tree 5 m. tall

shrub 3 m. tall, flowers  
all fallen, fruit black fleshy.  
small tree 8 m. tall, with  
spreading prop roots; upper  
leaves much smaller  
than lower; sterile.

shrub 1 m. tall; fruits  
immature.  
same, flower white.

same

same

170 m.



~~terrestrial~~ flowers pale  
magenta-pink.  
flowers white.



- 46540 *Scaevola taccada* (Gaertn.) Roxb.  
occasional
- 3 41 *Premna obtusifolia* R.Br.  
occasional
- 1 42 *Andropogon*?  
dominant grass
- 2 43 *Scleria*  
common
- 42 44 *Wedelia biflora* (L.) DC.  
common in edges  
of thickets
- 40 45 *Glochidion*  
common
- 2 46 *Ormosia*?  
common
- 3 47 *Fimbristylis*  
common in <sup>flat</sup> marshy  
ground
- 8 48 *Nephrolepis hirsutula* det Jonett, 1976  
very common

July 26 - Dalipelinaw Distr.,  
near Yap High School  
about 1 1/2 mi. W of Gilam, 20. S. 20. N.  
of Colonia  
in cleared, disturbed  
soil around new dwelling

- 7-7 49 *Fimbristylis cymosa* R.Br.  
common
- 43 50 *Muntingia calabura* L.  
occasional

- shrub 1.7 m. tall, flowers  
white, fruit white.
- shrub 2.5 m. tall; flowers  
very pale green; fruit  
blue-black when ripe.  
erect.
- stems weak but erect &  
ascending.
- sprawling elongate  
herb, heads yellow.
- shrub 2 m. tall,  
leaves pendent from  
branchlets; fruit immature.
- shrub 2 m. tall,  
flowers whitish with  
brown veins.
- stems weak but erect.
- fronds erect.

30 m

"puah"

shrub 2.5 m. tall, petals  
white, fruit immature.  
"pelang"



- 46551 *Vernonia cinerea* var. *parviflora* (Bl.) DC.  
 71 locally abundant
- 7252 *Mimosa pudica* var.  
 very common generally
- 75 53 *Fimbristylis*  
 occasional on bare soil.
- 91 54 *Euphorbia reinwardtiana* Bl.  
 very common on bare soil
- 65 55 *Fimbristylis tristachya* R.Br.  
 very common on bare soil.
- 3 56 ~~Cochlosiphon~~ *Cochlosiphon* cf. *aestuanus*  
 occasional, on bare soil.
- 4 57 *Fimbristylis* cf. *dichotoma* L.  
 rare, on bare soil.
- 31 58 *Mimosa* cf. *invis*?  
 common
- 73 59 *Ipomoea littoralis* Bl.  
 common in weedy places

- heads bright purple.  
 "mami"
- woody stems procumbent  
 & ascending, leaves <sup>purplish</sup> green;  
 very sensitive; flowers  
 bright purple.  
 "dammi"
- small tufts, erect. "puah"
- erect, tip arching, sap milky;  
 flowers white. "lululiai"
- caespitose, culms erect,  
 basal part of spikelet shedding  
 seeds and scales, terminal  
 part flowering. "puah"
- very prostrate, stems  
 radiating from a root  
 crown; flowers yellow.  
 "dar'nil"
- "gutuguch" or "guruguch"
- ~~st~~ tangles, stems  
 prostrate & ascending,  
 leaves & stems green, leaves  
 somewhat sensitive to  
 touch; sterile. "pali'ana"
- twine, corolla purple.  
 "lili"



Mimosa-	paliang
Fimbristylis	gutuguch
Corchorus	da'nil
Fimb. vult.	puah'
Euphorbia	lululiai
Fimb.	puah'
Mim. pudica	damu
Mimosa	dili
Muntingia	pelang
Fimbr. cupr.	puah'
Vernonia	mami

names from  
"Ihul" or "Leang", chief of  
the Imuf Village.

One large tree of  
*Ravenala madagascariensis*  
at old Japanese Agricultural  
Station site. Said to be  
one of the on island.

*Helminthostachys zeylanica*  
brought in.

*Ficus elastica* in Colonia.

What appears to be  
*Mimosa invisa*, but is  
not at all purplish, is  
common, forming very  
unpleasant tangles.  
All seen are sterile at  
this season. (#46558)

The *Mimosa pudica*  
here is much more  
robust, woody, and  
quite prickly, compared  
with other places. The  
branches tend to be ascending.  
(#46552)



1945 Caroline Is. <sup>check</sup>July 27 Hill 1/2 mi. s.w. gitam  
~~near airstrip~~Pandanus savanna  
with Scaevola and grass.  
6 b.w. 3 bod.Pandanus tectorius - up to  
8 m. tall, irregularly shaped,  
2-20 m.Calophyllum inophyllum  
scattered saplingsScaevola taccada very  
commonDecaspermum fruticosum  
~~occasional~~ shrubsCommersonia bartramia  
occasional shrubs.Melastoma  
occasional small shrubs.Macaranga  
~~common~~  
occasional small shrub.Rhus  
rare small treeGlochidion  
occasional small tree.Premna  
occasional shrubTimonius  
occasional shrubHedyotis  
common small shrubPhotos  
spoiled  
film did  
not run

Yap

herbs Spathoglottis 2 spp.

Andropogon? dominant grass

Rhynchospora rubra

Scleria

Hyptis capitata

Nephrrolepis

Lygodium scandens

Cassytha filiformis

Lycopodium cernuum

Ischaemum

Stachytarpheta urticifolia

Mimosa pudica (near

Gleichenia linearis

Nepenthes mirabilis

Zacca leontopetaloides

Fimbristylis

On bare area

Disneria

Andropogon

Andropogon

Lepturus

Phyllanthus

Phyllanthus

Glossogyne

Spermacoce

Polygala paniculata

Cassytha

Rhynchospora rubra

Euphorbia reinwardtiana

Gleichenia linearis

Nepenthes mirabilis

Fimbristylis tristachya

Alysicarpus

Curatiga orchivides

v c  
c  
c  
c  
c  
c  
l c  
l c  
c  
c  
o  
c  
o  
c  
o  
l  
l  
o  
o  
o  
c  
c  
c  
o  
c  
c  
o  
o  
c  
l a  
c  
c  
o  
o



Farther along road Pandanus is much thicker, shrubs also more numerous.

Locally, in more open areas *Lycopodium comum* is abundant, even dominant.

In depressions are forests, principally of *Trichospermum* and *Pandanus*. A few spindly shrubs of *Decaspermum*, *Scaevola* and other savanna species. Water spreads out over the ground at least after rain.

Very little ground cover. Many vines - *Cassytha*, *Ipomoea*, *Calopogonium*, *Asclepiad*, etc.

In edges *Schizaea* spp., *Lindsaea*, etc on bare ground. 2 hot, 2 p.m.

Photos spoiled  
film did not run

July 28 - Left Yap for  
Ulithi 6:50 a.m.

Weather hot, intermittently sunny, intermittently thinly overcast, a shower or two in sight.

Arrived about 5:30 at anchorage.



~~July 27~~ July 27 - hill ~~1~~ mi. s.w.  
of Gitam, s. of Yap High School  
in Pandanus-grass  
savanna

46560

Timonius

82

occasional

10 61

Timonius

6

62

Hedyotis fruticulosa Volk.  
common

10

63

Stachytarpheta urticifolia  
common Sims~~64 Stachytarpheta~~

5

64

Hedyotis fruticulosa Volk.  
common

1

65

Alysicarpus  
occasional

6

66

Melastoma  
common

7

67

Gleichenia linearis (Burm. f.)  
common colonizing bare  
soil areas.

2

68

Melastoma  
common

4

69

Rhynchospora rubra (Lour.) Mak.  
common

2

70

Andropogon brevifolius?  
common on bare soil

24

71

Dimeria  
common on bare soil

40 m.



shrub 2 m. tall, old leaves red;  
fruit immature.

shrub 2 m. tall, old leaves  
turning red, flowers white,  
abortive fruits green.

branched shrub 1 m.  
tall, flowers purple.

shrub 1 m. tall; leaves  
bright green, bullate,  
flowers dark blue.

sparsely branched  
shrub, rather ~~erect~~  
reclining to ascending,  
flowers purple. (wood sample).  
~~prostrate~~ decumbent  
stems from root crown.

low shrub, 0.8 m. tall  
flowers white, <sup>outer stamens</sup> red, inner yellow.  
rhizome buried. (plants  
outside bare areas much  
larger and more complex).

shrub 1 m. tall; flowers  
white, <sup>outer</sup> stamens red, inner yellow.  
caespitose, some heads  
viviparous.

procumbent, ~~sterile~~ mostly  
sterile.

plants erect.



- 46572 *Spermacoce*  
2 common on bare soil
- 2 73 ~~*Lepturus*~~ *Thaumatococcus cochinchinensis* (Forst.) Hubb.  
occasional
- 2 74 *Haloragis*  
common on bare soil
- 1 75 *Andropogon*  
occasional on bare soil
- 12 76 *Glossogyne tenuifolia* Cass.  
occasional on bare soil
- 12 77 *Phyllanthus*  
local on bare soil
- 4 78 *Andropogon*?  
abundant
- 78 79 *Oxalis*  
locally abundant, especially  
on bare soil
- 476 80 *Curculigo orchioides* Gaertn.  
very common on bare  
clay soil.
- 6 81 *Phyllanthus*  
very common on bare soil
- 47 82 *Eleocharis*  
common in water-filled  
trench.
- 48 83 *Euphorbia*  
very abundant on  
hill top, especially  
on bare ground
- 1 84 *Salomonella cantoniensis* Lour.  
occasional on bare ground
- 4 85 *Physalis*  
common on bare ground

plants erect, purplish;  
flowers white.

erect, flowers reddish.

sterile

rays yellow.

prostrate

50 m.  
↓ small tufts, culms  
erect.  
erect, flowers pink.

flowers yellow,  
about at surface of  
soil.  
erect

erect, branches  
arching at tips; flowers white.

flower blue.

45 m.  
erect, flowers yellow,  
no brown area in center.



46586 *Scleria*  
34 common

2 87 (fungus)  
on *Scleria*

July 27 - 1/2 mi. n.e. of pond  
near Denikan  
in edges of  
low secondary forest of  
in wide stream valley

1 88 *Desmodium heterocarpum*  
rare

1 89 *Spathoglottis*  
occasional in grass near

~~1 90 *Spathoglottis*~~

1 90 *Spathoglottis*  
occasional in grass near

1 91 *Schizaea dichotoma*  
common under trees

1 92 *Schizaea*  
occasional under trees

1 93 *Lindsaya ensiformis*  
common under trees

2 94 *Ischaemum*  
occasional in grass at

5 95 *Scleria*  
occasional

296 *Pandanus tectorius*, Park.  
abundant

50 m.

50 m. swollen grains greenish  
yellow.

20 m.

*Pandanus* and *Trichospermum*

branched ~~tree~~ herb 1 m.  
tall. flowers bright purple.  
flowers pale pink, column  
white, lip crimson  
with yellow prominence.  
flowers white except  
for yellow prominence on  
lower part of lip.

leaves curled

stems ascending

stems ascending,  
sharp-angled.  
tree 5 m. tall.



Labels  
typed

July 27 - Luej (Lueis)  
Village, southeast of airstrip  
in semi-cultivated  
secondary forest around  
swellings

46597 *Bambusa arundinacea*  
common (Retz.) Willd.

2 98 *Thelypteris*  
abundant

43 99 *Pentotheca lappacea* (L.) Desv.  
occasional

46600 *Dioscorea alata* L.  
occasional

2 01 *Tectaria crenata*  
occasional

2 02 *Angiopteris erecta* Hoffm.  
occasional

4 03 ~~Sperma~~ *Hedyotis* ?  
occasional

42 04 *Spermaoce ocyroides* Bunn. f.  
occasional

45 05 *Lindsaya*  
common on wet earth ledges

73 06 *Dioscorea pentaphylla* L.  
occasional

73 07 *Lygodium circinatum*  
common

4 08 *Lygodium cf. flexuosum*  
occasional

10-15 m.

culms close together,  
erect arching at top,  
10 m. tall, dark green,  
up to 5 cm. thick.

fronds erect from  
horizontal rhizome,  
arching at top.

vine climbing in  
trees, sterile.  
fronds erect.

fronds almost erect, 3 m. tall,  
from corm-like rhizome,  
3 m. tall, fragrant  
when broken.

scrambling herb, flowers  
white.

vine climbing in bushes;  
sterile.

climbing in trees, fronds  
fruiting distally, then  
sterile again.

climbing in trees.



July 29 - Falalap I.  
Coconut plantation  
with some trees

Trees -

*Artocarpus*  
*Casuarina*  
*Hibiscus tiliaceus*  
*Carica papaya*  
*Calophyllum inophyllum*  
*Ficus prolixa*

Shrubs

*Pipturus argenteus*  
*Cremna obtusifolia*  
*Morinda citrifolia*  
*Terminalia samoensis*  
*Journefortia*  
*Plumeria rubra*  
*Melochia*

*Digitaria*  
*Conyza canadensis*  
*Achyranthes*  
*Dactyloctenium aegyptium*  
*Flemingia uderalis*

Herbs

*Alocasia macrorhiza*  
*Vigna marina*  
seedlings abundant  
on open sand. seedling leaflets <sup>acute</sup>  
*Euphorbia charissoi*  
*Euphorbia cyathophora*  
*Wedelia biflora*  
*Lippia nodiflora*  
*Cassytha filiformis*  
*Triumfetta procumbens*  
*Eleusine indica*  
*Pennisetum polystachyum*  
*Eragrostis tenella*  
*Fimbristylis cymosa*  
*Pilea microphylla*  
*Phyllanthus amarus*  
*Euphorbia hirta*  
*Sida rhombifolia*  
*Heliotropium oval. v. depr.*  
*Cyperus cf. iris*  
*Cyperus compressus*  
*Tridax procumbens*  
*Desmodium canum*  
*Cenchrus echinatus*  
*Fimbristylis cymosa*  
*Lepturus repens*  
*Lippia nodiflora*  
*Ischaemum* (near air strip)  
*Pennisetum* (near air strip)  
*Ipomoea batatas* (cult.)  
*Boerhaavia cf. mutabilis*  
*Musa sapientum* (cult.)  
*Oplismenus compositus?*



Taro pits -  
ridges of earth on  
sides built up with  
rude stone work. Central  
part with mud piled  
up almost to surface  
of water, deeper ditches  
along sides.

*Cyrtosperma* -  
*Colocasia* both  
abundant - *Cyrtosperma*  
to 3 m. tall, scapes 1 -  
1.5 m. petioles + scapes  
smooth, perfectly  
cylindric. A slight  
articulation just below  
blade, but blade  
erect.

weeds

*Echinochloa*  
*Alternanthera*  
*Blechnum*  
*Ludwigia octovalvis*  
*Eleocharis geniculata*  
*Cyperus* ~~to~~ *bevipolius*  
*Cyperus javanicus*  
*Fimbristylis cymosa*  
*Eleusine indica*  
*Digitaria*  
*Phyllanthus amarus*  
*Vigna maritima*  
*Pennisetum obtusifolium*  
*Alocasia*  
*Lippia nodiflora*

on banks

*Alocasia*  
*Pennisetum*  
*Ficus prolixa*  
*Vigna*  
*Fimbristylis*  
*Euphorbia corollata*  
*Paspalum distichum* ? *stolon*  
*Phyllanthus amarus*  
*Pilea microphylla*  
*Blechnum*  
*Morinda*  
*Canva*  
*Stachytarpheta jamaicensis*  
*Pennisetum polystachyum*  
*Lippia*  
~~*Euphorbia*~~  
*Lepturus*  
*Varonia cinerea*  
*Achyranthes*  
(5 equal broadly lanceolate  
tepal, fimbriate - ciliate  
staminodial cup half  
the length of the stamens  
+ pistil. bracts + filaments  
pink.  
*Polypodium scolopendria*

*Paspalum vaginatum*



Beach ridge about 5 m.  
above l.t. along n. coast of  
Fakalap. cobbles to boulders.  
lined below with eroded  
beachrock, this very coarse.  
shows signs of consider-  
able abrasion, pot-holing, etc.  
Reef flat no more  
than 100 m. wide here.

Photos

B+w. channels in erosion ramp.

view of erosion ramp

views of beach ridge

abraded part of beach-rock

erosion ramp

pot holes in same

channels with abrading  
pebbles in them, in water.

3 shots panama-

erosion ramp with

beach-rock remnant

pebble beach

boulder ridge.

2 shot pan. from top of ridge

beach ridge

reef flat + erosion ramp

from top of ridge along ridge  
all taken toward west, as  
sun was a little east.

none of  
these  
good  
because  
film did  
not  
wind.

Boulder ridge covered  
by a mixture of *Wedelia*,  
*Callicarpon*, *Clusia*, *Pisonia*,  
*Premna*, and *Tournefortia*.

On open parts, *Flemingia*  
*industralis*

*Sporobolus**Hedyotis* *abrida* *punctata**Polyprosopus* *seal* *plendia**Triumfetta**Lepturus**Tacca*

✓ breadfruit tree mai

coconut tree lu

✓ sugar cane makil

✓ *Alocasia* - feleh✓ *Cyrt.* bulia✓ *Colocasia* yoth✓ *Phys. ang.* frang peng  
fruit eaten✓ *Hib. til* kulifoy

bark used for cloth for lavalava

✓ *Hed. com.* chiwida✓ *pahaya* *pahwai*

a Ulithi man said that  
*Cerchurus echinatus* was  
not here in Japanese time,  
but came since.

✓ *Tacca* - mog mog✓ *Morinda* - ~~low~~ lot

fruit eaten with sugar  
lvs. for medicine young fruit  
for medicine



- ✓ *Casinytha* - ulul  
fed to children  
and eaten by adults
- ✓ *Barr. australis* "hul"  
wood used for canoes  
and for paddles
- ✓ *Ip. litt.* - chowel  
lvs. used for food
- ✓ *Calli. cand.* hatar  
used medicinally  
leaves crushed and  
rubbed on sores.
- ✓ *Cassia occ.* bialeng
- ✓ *Dioscor. bulb.* "palan"  
not eaten
- ✓ *Petrosia* spp. mo
- ✓ *Altophyllus* ngoi
- ✓ *Argemone* spp. harfat
- ✓ *Ficus tinifolia* howaf  
fruit eaten
- ✓ *Hym. litt.* "maching"
- ✓ *Cuc. max* calawas

- ✓ *Frax. casei* - hachis
- ✓ *Psacolla* - lod
- ✓ *Diosc. exc.* - tal
- ✓ *Cratogeomys* - abuch  
fruit eaten cooked or raw when ripe
- ✓ *Lippia* - said to have  
come during W.W.II
- ✓ *Capsicum* - mig
- ✓ *Artemisia vulg.* - ianwas
- ✓ *Asclepias am.* - mangarita
- ✓ *Cler. inerme* - habui
- ✓ *Casuarina* - lach
- ✓ *Dioscorea alata* - tooq
- Area
- ✓ *Tournefortia* - chel

Small number of  
reasonably healthy looking  
young Area catfish in village,  
in sheltered place, about 3-4 m. tall  
(not collected).



- July 29 - Falalap Islet.  
under coconut trees  
in and around village
- 46609 *Paspalum distichum* Berg.  
45 common along path  
near taro pit
- 1 10 *Hedyclium coronarium* Koen.  
edge of taro pit.
- 1 +11 *Barringtonia asiatica* (L.) K.  
small one tree seen
- 1 12 *Allophylus timorensis*  
one seen.
- 3 +13 *Casuarina equisetifolia* L.  
occasional
- 1 14 *Dioscorea bulbifera* L.  
occasional
- 1 +15 *Ipomoea littoralis* Bl.  
occasional
- 42 16 *Eugenia aquea* L.  
occasional
- 2 +17 *Caesalpinia pulcherrima* (L.) Sw.  
planted
- 1 18 *Citrus aurantifolia* (Christm.) Swingle  
planted
- 1 +19 *Bougainvillea glabra*  
planted
- 1 +20 *Thesvetia peruviana*  
planted
- 42 +21 *Clerodendrum inerme* (L.) Gaertn.  
planted (but said to be  
native)
- 71 +22 *Pseuderanthemum cantherii*  
var. *atropurpureum*  
planted

1-3 m

flowers said to be white  
"chiwin"

small sterile tree,  
"hul" Wood used for canoes and paddles.

slender shrub 3 m.  
tall flowers white. "ngoi"  
tree 10 m. tall "lach"

sterile vine "palau"  
tubers not eaten.

sterile vine "cho-wel"  
leaves used for food.

small tree "harfat"  
fruits said to be small,  
pink or red, eaten.

plant shrub, 1 m. tall,  
flowers scarlet.

tree 4 m. tall, fruit greenish  
yellow when ripe.

small tree, flowers  
yellow.

shrub 1.5 m. tall; flowers  
white with maroon  
stamens and style. "habui"

shrub 4 m. tall, leaves  
maroon; flowers bright crimson  
pink.



Labels  
144 typed 1965 Caroline Is.

46623 *Dioscorea alata* L.  
planted

41+24 *Muntingia calabura* L.  
planted

1 25 *Dioscorea esculenta*  
planted

1 26 *Artemisia vulgaris* L.  
planted? specimen discarded

1 +27 *Ochrosia oppositifolia*  
occasional

1 27a ~~27~~ *Capsicum frutescens* L.  
planted  
same - in coconut -  
breadfruit land  
with sweet potato and  
taro patches.

61 28 *Achyranthes*  
occasional in open  
or semi-shade

84 29 *Digitaria*  
common in sweet  
potato patch

1 29a  
42 30 (fungus) *Ophiostoma*  
(as 29)  
common on fallen  
banana "trunks".

1 29b  
42 31 *Melochia*  
occasional on inner side of

14 3 +32 *Ipomoea tuba* (Schlecht.) Don  
common on

Ulithi Atoll

145

sterile vine. "toog"  
tubers eaten

shrub 3 m. tall; flower  
white, fruit pink when  
ripe, eaten.

sterile vine. "tal"  
tubers eaten.

Plants of THE CAROLINE ISLANDS

*Capsicum frutescens* L.

Locality Falalap Islet  
Ulithi Atoll

Occurrence Planted under coconut trees  
in and around village.

Date July 29, 1965 Alt. 1-3 m

Coll. F. R. Fosberg No. 46627a

Remarks "mig" (sheet mixed with another col-  
lection)

white.

shrub 1 m. tall; flower  
with crimson center,  
white edges.

Tangled vine; flowers  
white, closing at 11:30 a.m.



*Plants of* THE CAROLINE ISLANDS

*Capsicum frutescens* L.

Locality Falalap Islet  
Ulithi Atoll

Occurrence  
Planted under coconut trees  
in and around village.

Date July 29, 1965 Alt. 1-3 m

Coll. F. R. Fosberg No. 46627a

Remarks "mig" (sheet mixed with another collection)



Lapole  
144 typed 1965 Caroline Is.

46623 *Dioscorea alata* L.  
planted

2124 *Muntingia calabura* L.  
planted

25 *Dioscorea esculenta*  
planted

26 *Artemisia vulgaris* L.  
planted? specimen discarded

27 *Ochrosia oppositifolia*  
occasional

27a ~~27~~ *Capsicum* *putrescens* L.  
planted  
same - in coconut-  
breadfruit land  
with sweet potato and  
taro patches.

28 *Achyranthes*  
occasional in open  
or semi-shade

29 *Digitaria*  
common in sweet  
potato patch

29a  
30 (fungus) *Ophiostoma*  
(as 29)  
common on fallen  
banana "trunks".

29b  
same - ~~outer~~ beach ridge

31 *Melochia*  
occasional on inner side of

32 *Pomoea tuba* (Schlecht.) Don  
common on

Ulithi Atoll

145

sterile vine. "toog"  
tubers eaten

shrub 3 m. tall; flower  
white, fruit pink when  
ripe, eaten.

sterile vine. "tal"  
tubers eaten.

aromatic. "iarwas"

small tree, flowers  
white, "mo".

"mig" (sheet mixed with another, coll.?)

branched herb, to 1 m. tall,  
stamens and fringe  
of staminal cup rose-  
pink.

culms decumbent to  
ascending.  
white.

shrub 1 m. tall; flowers  
with crimson centers,  
white edges.

tangled vine; flowers  
white, closing at 11:30 a.m.



Labels  
146

1965 Caroline Is.

46633

4

*Hedyotis albedo-punctata*  
(Merr.) Forst.  
common in open areas on  
outside of

34

same - near airstrip

3a

34

*Cyperus compressus*  
occasional along roadside

pl. up

1

35

same - in Taro pit  
*Cyrtosperma chamissonis*  
planted in mud

1

36

*Digitaria*  
occasional in mud

2

+37

For. Bush

*Cleusine indica* (L.) Gaertn.  
common in mud ~~in mud~~

41

38

*Fimbristylis cynosa* R.Br.  
rare in mud

1

39

*Phyllanthus amarus*  
rare in mud

41

+40

For

*Blechnum brownii* f. *puberula* Less.  
common in water

72

41

*Cyperus brevifolius*  
very common, submerged

6

3+42

*Eleocharis geniculata*

~~gap~~ Ulithi Atoll

147

prostrate; leaves firm,  
sub-fleshy; corolla white.

acaulercent; leaves  
bright glossy green, up  
to 3.7 m. tall. petiole  
cylindric, with a  
faint articulation  
just below blade,  
blade erect; scapes  
1-1.5 m. tall, curved  
at summit; spathe  
firm, fleshy, bronze-green  
outside, spike apparently  
of uniform flowers.  
"bulb"

caespitose; heads green.



Sample  
Cupped

46643

same - on ~~the~~ ridges of  
earth beside low pit  
*Ficus prolixa* var. *carolinensis*  
rare

1

44

*Phyllanthus amarus*  
common

same, along road in  
coconut plantation

43 + 45

*Terminalia samoensis* Rech.  
occasional in undergrowth

same - on bare coral  
gravel in full sun.

32

46

*Nostoc commune*  
abundant

same - on bare boulder  
ridge of coarse coral rocks.

32

47

(blue green alga)

sprouts and seedling  
only seen.

shrub 3 m. tall; flower  
white, fruit ~~green~~  
immature.

dark dull drab green,  
gelatinous, bladder-like.

staining rock very dark.



July 30 - left Ulithi at 10:15 a.m.  
through pass between Begef  
and Mas Islets.

Begef has no visible plants.  
Is merely a tiny sand-bar  
with considerable debris.  
Almost submerged at high  
tide.

Mas has a small grove  
of *Tournefortia* and two  
coconut trees.

A brown booby fishing near  
Begef.

Outside we headed east.  
On right ahead are Bulibul  
and Losiep Islets with a  
small one between them,  
all apparently well vege-  
tated. No details yet.

Ahead in the distance  
are Gielap I. and Jar I. also  
well vegetated. No details yet.  
~~possibly ?~~



Through glasses from several  
miles north these islets  
are located on extensive white  
sand flats (even at rather high

tide - They are rather well  
covered with coconuts but  
seem to be predominantly  
natural vegetation  
with coconuts emergent  
from it. Nowhere do the  
coconuts seem to form a  
closed canopy. The small  
islet between them has  
fewer coconuts. The  
reef between the  
three seems to form a  
continuous line of  
green and breakers.  
The small islet to the  
east is merely a sand  
bar with no vegetation,  
almost connected with  
~~Bulibul~~ Losiep.

Photos (Kod.) 4 shots Losiep, Bulibul <sup>125</sup> f. 11  
" " f. 8

Gielap & Jar islets from  
the n.w. scarcely seem to  
be connected with a breaking  
reef. From east the reef is clear.  
Gielap I.



Jar has quite a few coconuts emergent  
from native forest, but not a complete canopy.  
Gielap has coconuts only on the w. third.  
Dark emergent trees (breadfruit?) in center  
native forest on east half. (over.)



The native forest <sup>on Gielap</sup> appears to be *Tournefortia* on periphery, the tall trees in center could be either *Pisonia* or bread fruit, *prob. Pisonia*. The coconuts in the west end are, in one spot, very yellow.

Veg. slopes gradually up from east on Gielap. Reef extends far to east. Appears to be lagoon water to east of the two islets for some distance.

Photos

had. Guelap, Jan, Gielap, Jan <sup>125</sup> 8+11 then one of both islets at F. 11.

Arrived at Fais about 3 p.m. ~~West~~ shore has 3 stretches of beach - a short one at the south end, a long one in the middle, a medium one at north end. These are fringed by a low tide reef flat, backed by a sand flats with coconut plantations. A house in center one. Between these are vertical cliffs 3-10 m. high, mostly undercut between tides.

Top of island has coconut plantation, but between cliff edge and coconuts is a strip with very low vegetation, then shrubs, then *Pandanus*, *Barringtonia* and several other

tree. The low vegetation zone is discontinuous, appears to be grass. Shrubs are *Tournefortia* and probably *Scaevola*. At south end the cliffs do not have a grassy zone, are rougher, seem to have *Pandanus dubius* as well as *P. testudinum*, and a mixed scrub forest. Flat at south end has many buildings under coconut trees. Broad reef flat extending south, 20 or 30 people on beach and out on exposed reef flat.

Went ashore at 3:45 p.m. at s.w. corner of island over broad reef flat - an almost indiscernible channel through outer edges of reef that is partly protected from the west by a projection of the reef where waves break. There is no trace of an algal ridge.

Much of reef flat seems to be a platform of large "wheels" of *Heliopora* (?) (a brown tabular *Porites*-like coral, seen at Bikini). Tide very low. Beach here is sandy but with large slabs of beachrock much abraded, here and there. (8/10/65)



1965 - Caroline Is.  
 Rochochoy, ~~Fatadog~~, ~~Chirich~~  
 July 30 - Village on  
 plateau, ~~east~~ <sup>south</sup> end of  
 island  
 around dwellings  
 under coconut trees.

- 46648 *Ocimum* <sup>sanctum</sup> ~~canum~~ L.  
 in garden
- 1 +49 *Hymenocallis littoralis* (Jacq.) Pa. Desb.
- 1 50 *Citrus grandis* (L.) Osb.?  
~~too~~ planted
- 1 51 *Citrus sinensis* Osb.  
 planted
- 2 +52 *Caesalpinia pulcherrima*  
 planted
- 1 +53 *Mammea odorata* (Raf.) Kost.  
 one tree seen
- 1 +54 *Hernandia sonora* L.  
 one tree seen
- 1 +55 *Capsicum frutescens* L.  
 uncommon
- 31 +56 *Hippobroma longiflora* (L.) Don.  
 very local
- 21 +57 *Paspalum conjugatum* Berg  
 weed in ~~road~~ path
- 42 58 *Ixora casei* Hance  
 one bush seen

July 30 - inland from  
~~Rochochoy~~, south end of island  
 in cultivated sweet-potato fields

2 +59 *Chrysopogon aciculatus*  
 local in edges of

1.5 m



aromatic, flowers purple.

scape 1.5 m. tall,  
 leaves distichous,  
 flowers white.  
 sterile shrub.

small tree, sterile.

shrub 2 m. tall,  
 flowers scarlet.  
 small tree 8 m. tall,  
 sterile.

tree 1.5 m. tall, sterile.

shrub 1 m. tall; flowers  
 white, greenish in center.  
 flowers white

large shrub 4 m. tall,  
 flowers scarlet "hachin"  
 hachin

prostrate with erect scape.



1156

Labels Type

1965 Caroline Is.

46660

*Vigna marina* (Burm.) Merr.  
common

1 + 61

*Portulaca samoensis* v. Poelln.  
occasional

21 62

*Ipomoea batatas*  
abundantly cultivated

9 5 3 63

*Phyllanthus urinaria* L.  
very local

21 64

*Boerhavia diffusa* ~~mutabilis~~  
occasional

1 + 65

*Paspalum conjugatum* Berg  
occasional

41 66

*Acalypha lanceolata* Willd.  
common

31 67

*Polygala paniculata* L.  
common

1 68

*Phyllanthus amarus*  
occasional

21 69

*Oxalis corniculata* L.  
occasional

21 70

*Sida microphylla* Cav.  
occasional

41 71

*Corchorus aestuans* L.  
common

41 72

*Emilia sonchifolia* (L.) D.P.  
common

93 73

*Digitaria* ~~violascens~~ Link  
common locally

1 74

*Paspalum dilatatum*  
rare *serotatum* L.

2 75

*Andropogon* ~~intermedius~~ R.Br.  
local

1 76

*Dioscorea esculenta* var. *fasciculata*  
planted(Roxb.) Pr.  
v. Bmk.

Fais

157

46663 *Phyllanthus* 343 *Amaranthus* yellow.46666 *Acalypha* 36 *Polyscias*46673 *Digitaria* 36 *Memo*46675 *Andropogon* 381 *Curcuma*46680 *Phyllanthus* 383 *Euphorbia*46694 *Melochia* *Chamaecyparis*?46695 *Psychotria*46704 *Psychotria*

46707 ✓ These are numbers

46711 *Achyranthes* of plants named to

46713 (grass) ✓

46721 *Opuntia* ✓ Genus only & not to.46727 *Sporobolus* ✓ put on Mayo cards.46732 *Asplenium* ✓ nodes.WE AINT MAD AT NOBODY -- WELL, MAYBE  
THERE MIGHT BE ONE OR TWO.- *erect*, prostrate, stems  
red; flowers yellow.  
flowers purple.

caespitose, erect.

erect

culms ascending.

vine climbing on bush.  
sterile.



- 46663 Phyllanthus 343 Amaranthus  
 46666 Acalypha 36 Polyscias ✓  
 46673 ~~Digitaria~~ ✓  
 46675 Andropogon 381 Curatella ✓  
 46680 Phyllanthus 383 Euphorbia  
 46694 Melochia ✓ ~~Chamaecypis~~? ✓  
 46695 Psychotria ✓  
 46704 Psychotria ✓  
 46707 ✓ These are numbers  
 46711 Acalypha of plants named to  
 46713 (grass) ✓ ~~Andropogon~~?  
 46721 ~~Andropogon~~ Genus only & not  
 46727 Sporobolus ✓ put on Mayo cards.  
 46732 Asplenium ✓

WE AINT MAD AT NOBODY -- WELL, MAYBE  
 THERE MIGHT BE ONE OR TWO.



1156

Labels Type

4/6660

+

1965 Caroline Is.

*Vigna marina* (Burm.) Merr.  
common1 + 61 *Portulaca samoensis* v. Poedn.  
occasional21 62 *Ipomoea batatas*  
abundantly cultivated2 5 3 63 *Phyllanthus urinaria* L.  
very local21 64 *Boerhavia diffusa* ~~mutabilis~~  
occasional1 + 65 *Paspalum conjugatum* Berg  
occasional61 66 *Acalypha lanceolata* Willd.  
common31 67 *Polygala paniculata* L.  
common1 68 *Phyllanthus amarus*  
occasional21 69 *Oxalis corniculata* L.  
occasional21 70 *Sida microphylla* Cav.  
occasional41 71 *Corchorus aestuans* L.  
common41 72 *Emilia sonchifolia* (L.) D.P.  
common93 73 *Digitaria* ~~violascens~~ Link  
common locally1 74 *Paspalum dilatatum*  
~~serotinum~~ L.  
rare2 75 *Andropogon* ~~intermedius~~ R.Br.  
local1 76 *Dioscorea esculenta* var. *fasciculata*  
planted

(Roxb.) Pr.

x Burh.

Fair

157

prostrate; flowers yellow.

prostrate, fleshy.

prostrate; sterile.

stems reddish.

prostrate

erect

erect.

erect; flowers white.

prostrate, rooting at nodes.

prostrate

mostly prostrate, stems  
red; flowers yellow.

flowers purple.

caespitose, erect.

erect

culms ascending.

vine climbing on bush.  
sterile.



1158

1965 Caroline Is.

- 46677 *Cassia occidentalis* L.  
occasional
- 78 *Desmodium triflorum* (L.) DC.  
occasional
- 79 *Physalis angulata* L.  
locally common
- 80 *Phyllanthus amarus* Sch. & Th.  
locally common at edge of

same - in coconut plantation on plateau

- 81 *Premna obtusifolia* R.Br.  
common

- 82 *Rhoeo spathacea*  
common around taro pit

- 83 *Cyrtosperma chamissonis* Merr.  
planted in moist taro pit

- 84 *Blechnum brownii* v. *puberulum* Less.  
weed in moist taro pit

- 85 *Hedyotis corymbosa* (L.) Lam.  
occasional in clearings

- 86 *Terminalia catappa* L.  
rare

- 87 *Callicarpa candicans* (Burm.f.) Hochr.  
occasional (several plants represented in collection)

- 88 *Mussaenda frondosa* L.  
occasional

- 89 *Dioscorea bulbifera*  
occasional

- 90 *Mussaenda frondosa* L.  
occasional

Fair

159

erect, 1.5 m. tall, flowers yellow

prostrate, forming mat. branched here.

15 m



small understory tree, fruit immature. spreading by rhizome; leaves fleshy, brittle, dark purple beneath, bracts purple. erect, 1 m. tall, sterile.

flowers white

small sterile tree.

dwarf shrub 3-4 dm. tall; flowers rose-pink.

small tree 5 m. tall, enlarged calyx lobe white. extensive sterile vine.

large shrub 4 m. tall, enlarged calyx lobe white, corolla bright deep yellow.



1160

1945 Caroline Is.

Fabales type. c.

46691

*Hibiscus tiliaceus* L.

4

common

1 + 92

*Ipomoea littoralis* Bl.

rare

4 + 93

*Cassytha filiformis* L.

common, parasitic on various hosts.

5

94

*Melochia compacta* Hoch.

common

2 3

95

(mass)

local in ground

2

96

*Alocasia macrorrhiza*

common in small clearings, where planted, and in coconut groves.

3

+ 97

*Polypodium scolopendria* Burm. f.

locally abundant

1

98

*Eugenia cf. aquatica* Lam.

2 trees seen

76

99

*Randia cochinchinensis* (Lour.) Merr.

common

46700

*Vernonia cinerea* (L.) Less. var. *parviflora*

72

locally common

2

+ 01

*Euphorbia hirta* L.

local

2

+ 02

*Tarcea leontopetaloides* (L.) O.Ktze.

common

2

03

*Artocarpus altilis* (Park.) Forb.

common

1

04

*Psychotria*

occasional

75

05

*Nephrolepis* (cf. *biserrata* Sw.) *hirsutula* Forst. f.

abundant

Fais

161

small tree 6 m. tall.

Twining; sterile.

stems green; flowers white.

shrub 3 m. tall; flowers deep crimson in center, white outer part.

stem 5 dm. tall; leaf blades erect; spathe purplish-bronze; spathe of white flowers, with yellow sterile appendage.

rhizomes creeping, fronds erect.

small tree; sterile.

shrub 1-1.5 m. tall, fruits turning reddish. flowers purple.

scape and leaves erect, scape to 1 m. tall.

tree 6 m. tall; sterile, lactiferous

small shrub, only seen sterile.

fronds erect.



162

1965 Caroline Is.

Labels typed  
46706

21

*Morinda citrifolia* L.abundant, especially  
young plants.

x1 07

*Melochia compacta* Hoch.

occasional

2 +08

*Calophyllum inophyllum* L.

occasional

1 +09

*Thuarea involuta*

occasional

3 +10

*Centella asiatica* (L.) Urb.

very local

yldow (or yltow)

same - small ~~grass~~opening dominated by  
tall grass

4 11

*Achyranthes aspera* L.

common

3 12

*Clerodendrum speciosissimum*

occasional

1 13

(grass)

dominant plant

1 14

*Hibiscus abelmoschus*

uncommon

July 30 ~~south coast~~  
~~south coast~~ denseyldow, west coast near south  
end of island

in dense scrub forest

back of cliffs

x2 15

*Pandanus tectorius* Park.

abundant, locally dominant

x2 +16

*Barringtonia asiatica* (L.) Kurz

abundant, locally dominant

Fais

163

shrub 3 m. tall; leaves  
glossy; flowers white.shrub 2.5 m. tall, flowers  
white with red center.  
small sterile tree.

prostrate, mostly sterile.

prostrate, rooting  
at nodes.repeatedly branched herb  
1 m. tall.~~herb~~ suffrutescent herb  
2.5 m. tall, flowers  
scarlet.rhizome prostrate above  
ground, branches erect, to  
1 m. tall; sterile.  
sterile

15 m

spreading tree 5 m. tall.

tree, to 8 m. tall, flowers  
from ground beneath.



164

1965 Caroline Is.

- 46717 *Ficus tinctoria* Ford. f.  
occasional in undergrowth
- 1 18 *Guettaarda speciosa* L.  
common
- 1 19 *Pipturus argenteus*  
common
- 41 20 *Pipturus argenteus*  
common
- 1 21 *Operculina*? *Operculina ventricosa* (Benth.) Peter?  
rare
- 1 22 *Allophylus timorensis*  
rare
- same - on <sup>rough</sup> limestone cliff
- 1 23 *Pandanus dubius*  
dominant on ledges
- yellow  
same - on open very  
rough <sup>not limestone</sup> terrace at  
top of cliffs
- 42 24 *Wedelia bipinna* (L.) DC.  
common
- 46 25 *Fimbristylis cymosa* R.Br.  
common
- 1410 26 *Heliotropium anomalum* L.  
very common
- 46 27 *Sporobolus farinosus* Hook.  
pure stand, in spray zone

Fais

165

shrub; fruit green.  
small sterile tree.  
shrub 4 m. tall, ♀  
shrub 3 m. tall, ♂  
extensive twines,  
stems slightly  
angled but definitely  
not winged; sterile.  
sterile seedling.

15 m

coarse, heavy shrub  
3 m. tall; sterile,  
leaves to 2 m. long &  
more.

1 m



prostrate, extensive,  
leaves succulent;  
heads yellow.  
tufted, stiff.

prostrate dwarf shrub  
flowers white. leaves fleshy.  
large dense tussocks  
of fibrous bases, to 3-4  
dm tall, completely  
sterile; leaves glaucous.



Labels  
typical

46728

~~Just~~ *Hedyotis albido-punctata* (L.) Merr.  
abundant

1 + 29 *Tournefortia argentea* L.f.  
common

4 30 *Scaevola taccada* (Gaertn.) Roxb.  
common

→ Fatadol south end of island  
same - on cliffs  
shaded by coconuts

3? 31 *Hedyotis albido-punctata*  
common on rough limestone

6 32 *Asplenium adiantoides* (L.) C. Chr.  
very locally abundant

8 33 *Paspalum distichum* L.  
(Col. from p. 153) dominant locally

Top of beach covered  
by *Vigna marina* in  
a great mat. *Scaevola*  
common at back of this  
with some *Tournefortia*.

Coconut grove back  
of this beach is very  
luminant. A very  
short distance in the  
rough limestone cliff  
begins - here not  
very steep. On it,  
under the ~~tree~~ coconut  
trees *Asplenium* and  
*Hedyotis albido-punctata*.  
On top is coconut

10 m



prostrate; leaves  
firm, ~~fl~~ somewhat  
fleshy; corollas white.  
shrub 1.5 m. tall,  
leaves frosty green, fleshy;  
flowers white.  
shrub 1 m. tall,  
flowers and ripe fruit white.

prostrate, fleshy;  
flowers white.

Plantation with scattered  
small trees + shrubs -

*Morinda citrifolia*  
*Artocarpus*

*Eugenia* cf. *aquae*  
*Carica*

*Terminalia catappa*  
*Melochia*

*Premna obtusifolia*

*Calophyllum inophyllum*

*Randia cochinchinensis*

(shrubs only, seen)

*Scaevola*

*Musa sapientum*

*Clerodendrum speciosissimum*

*Hibiscus tiliaceus*

*Ochrosia oppositifolia*  
(over)



On the ground *Tacca* and *Alocasia* (especially) are common, <sup>thunder</sup> and *Morinda* seedlings. In openings are planted sweet potatoes and *Alocasia*. No tobacco or *Manihot* were seen, but these are known to be raised here, tobacco, at least, in quantity.

In one such clearing a coarse erect grass is dominant (46713), but none was seen fertile. *Achyranthes* was common mixed with it.

Along the west side of the plateau, back from the top of the cliffs is a strip of rather low forest, dominated mostly by *Barringtonia asiatica*, locally by *Pandanus tectorius*. It is 20-100 m. wide.

Its inner edge is largely *Pipturus*, *Premna*, *Melochia*, *Morinda*, etc. Where the outer edge of this comes to the cliff, as near the south-west corner, the cliff edge and ledges are occupied by *Pandanus dubius* forming a coarse

rigid scrub. The cliff is of rough limestone and bare spots in it have *Fimbristylis cynnosa*, *Hedyotis albidopunctata*, and *Wedelia*.

Farther north, the outer edge of the forest zone is back as much as 50 m. from the edge of the cliff. The edge is largely *Pandanus* but with a fringe of *Scaevola* and scattered *Tournefortia*. The ground here is pitted coral limestone of extreme sharpness but the pitting rather fine rather than pinnacled. This is covered locally with a pure stand of *Paspalum distichum*, locally with a mixture of *Heliotropium anomalum*, *Hedyotis albidopunctata*, and *Wedelia biflora* with scattered shrubs of *Scaevola* and *Tournefortia*, and with a strip of varying width just back of the edge, in the spray zone when the weather is at all rough, of ~~a~~ a grass that forms



dense, extremely firm tussocks, with fibrous masses of leaf and culm bases up to 3 dm. high and 2 dm. wide, with erect linear glaucous leaves up to 2-3 dm. long. This is at this season entirely sterile, but is almost surely the *Phorobolus* collected on Orote Point, Guam in 1963.

In the interior of the plateau are large open fields planted to sweet potatoes. These are many acres in extent, back of the village that is at the top of the escarpment in the middle of the south end. The soil in these fields is, at the surface, at least, composed of pea-sized and smaller spherical pellets of earthy material - probably the phosphate that was mined by the Japanese.

A considerable assortment of weeds is common in these fields.

The village is densely shaded by coconut trees and the houses

are surrounded by *Citrus*, *Carica*, *Musa*, *Ixora*, *Hymenocallis*, and other planted ornamental and edible plants.

One small *Cyrtosperma* pit, without water, was seen in the interior.

Remains of a narrow-gauge railway ran along the foot of the escarpment, back of the beach.

We had to leave between 6 and 6:30, so the reconnaissance was indeed hasty. To the east along the south coast, beyond the village, are more cliffs, and an area of sloping lighter green vegetation. This was not identified.

Collected about 82 species.

In addition Michael got  
*Eleusine indica*

*Amaranthus* sp.

*Eragrostis tenella*

*Pilea microphylla*

*Plumeria rubra*

*Polyscias scutellaria*

*P. guilfoylei*

*Piper betle*



*Cappari cordifolia*  
*Crinum asiaticum*  
*Polyscias* sp.  
*Ocimum canum* (Hall green form)  
*Muntingia calabura*  
*Delonix regia*?  
*Euphorbia cyathophora*  
*Cratogeomys* *speciosa*  
*Zephyranthes rosea*  
*Ochrosia oppositifolia*  
*Zoysia tenuifolia*  
*Mirabilis jalapa*  
*Euphorbia chamaesyce*  
*Colocasia esculenta*  
*Xanthosoma sagittifolius*  
*Curcuma* sp.

The *Curcuma* collected by Michael is probably not identifiable, as it is a very decauperate specimen. I saw what was probably the large one with rose bracts, but sterile only. Did not collect it.

July 31 - enroute to Lamotrek.  
 Wind is southwest something over 10 knots. (Echin says this is normal wind direction for July & August, trade the rest of the year)

At sunset, just west of Faraulap, high cirrus or cirro-cumulus clouds are moving from north or northeast across new moon.

Saw a brown booby (immature or immature other species) circling around boat for a few minutes, probably looking for fish.

Aug. 1 - passed Olimarao, with 2 islets, at about 7:30 but did not see it until so far past that I could only make out for certain that it is wooded.

Elato ahead. One large islet on north side, one or two tiny ones far to south. Of these, the one farthest to east has only a few trees. Echin says there are people on Elato, and an entrance to the lagoon.

From a bit closer, another tiny islet can be seen, much farther to the southeast. Then another

well wooded

Elato 9.  
Kari 8.

thin with only a few trees  
Falipi 9.



Faite I. fairly large islet far to the northeast.

Older I. Tops of trees barely visible between the two tiny islets farthest to south.

Then more tree tops between the big islet and the first one to the south. The last two seen are obviously across the lagoon.

From a bit farther on, a tiny islet, much smaller than any of the others, can be seen between the first and second counter-clockwise from the larger one. Looks like only one or two trees.

Then, far in the distance dead ahead, another fairly large islet can be seen.

Pugue I. Lamotrek Atoll.

Later, Lamotrek I. can be seen in distance bet. Faite and Pugue.

High overcast over the entire sky. Very threatening weather to the west.

From north, Plate Islet looks like a solid broad-leaf forest with coconuts emergent from it.

All three islets of Lamotrek

are well wooded, ~~Faite~~ and well planted to coconuts. Faite seems, from the north, to have a dense broad-leaf understory under an almost complete coconut canopy.

A large boulder on reef about  $\frac{1}{2}$  the way from Pugue to Faite.

Something probably corresponding to Riquisifuai I. can be seen on the s.w. reef but apparently has no vegetation. Later appears to be a sand bar.

A long sand spit, entirely bare, extends along the reef from Pugue I. toward Faite about the length of Pugue and not quite connected with it. On inner edge of

N.W. side of Pugue has considerable broad-leaf undergrowth. esp. toward n.e., little near s.w. end. N. side, toward n.e. has solid Tournefortia forest. Some Pisonia near center, almost as tall as coconuts. Coconuts sparse in the Tournefortia on n.e. part. Boulder ridge and rather open vegetation on ~~near~~ east shore. Bushes darker green than Tournefortia.



Bare sand bar on reef  
between Lamotrek Islet and  
the passage.

Several small bars and  
reefs exposed on south  
reef about 1/4 or 1/3 the way  
from Lamotrek to Fuite. No veg.  
There will vary in number  
and extent with tide.

Observations made about 5 a.m.

Cordia, Prunna trees  
around landing

Colocasia, ~~Colocasia~~ <sup>Xanthosoma</sup>

growing spontaneously  
Breadfruit emergent over  
coconut canopy.

- ✓ Callisarpa - ligita
- ✓ Hed. biflora "hupursai"
- ✓ Portulaca sam. hof.
- ✓ Nic. tab. tobac
- ✓ Ip. bat. hamoto
- ✓ Fimbr. cym. puhor
- ✓ Jussiaea ruga pahur
- ✓ Plumeria leu
- ✓ Cath. ros. pem pun
- ✓ Ocimum commun. whamung

- ✓ Phyllanthus walpari
- ✓ Cordia harai
- ✓ Erag. tenella rural
- ✓ Cleome puguruman
- ✓ Euph. cyath. warupii
- ✓ Vernonia choranti-wai
- ✓ Fleurya ind. apelefele ager
- ✓ Polyth. ad. shirishi
- ✓ Prunna ran
- ✓ Colocasia motomori
- Xanthosoma 2 spp. from Hawaii
- ✓ Zephyranthes rosea pingtata
- Pand. tect. fan
- ✓ Gomphrena wai
- ✓ Caesalp. pulch. waru pini
- ✓ Cuc. max. calabatus
- Calavaria
- ✓ Tagetes puarang
- ✓ Canna
- ✓ Alocasia
- paivai
- Fithes (6 m tall)



- ✓ Pasp. conj. pugus paraff
- ✓ Polyporus put. boyang
- ✓ Cler. merme habui
- ✓ Pteris tripartita siviligai
- ✓ Cratera apus
- ✓ Morinda lei'
- Musa wis
- ✓ Crinum iup
- ✓ Antocarpus mai
- ✓ Hib. x ros. in. alig. proachg
- ✓ Cyrtosp. purak
- ✓ Hib. til. filifeng
- ✓ Brunngt. rac. sar
- ✓ Ficus tinet. awan
- ✓ Vigna holu
- ✓ Nephrolepis 'hamnia  
'hamala'
- ✓ Acrostichum 'shapaho'

- Hedyscium chaimini
- moss (Lemophanes) rogor
- ✓ Pard. dubius pohó
- ✓ Fed. coron. chabubu
- ✓ Alpinia pur. telan
- ✓ Curcuma ian ju
- sugarcane wōw
- Canna purang
- ✓ Cyp. dardus ~~sp. goudiwoipod~~
- ✓ Ceratopteris martini
- ✓ Thelypteris hamara
- ✓ Lindernia <sup>white</sup> harholu
- P. antipoda
- ✓ Polygonum ormed
- taru pit
- Col. & Cyp.
- ✓ Gymenoc. liris
- ✓ Pseudanth habui



- ✓ Piper Tolboy
  - ✓ Inosarpus huro
  - ✓ Allophylus ngen or len
  - ✓ Medelia atiot
  - ✓ Pisonia hadu
  - ✓ Eugenia aquea fariap  
fruit eaten
  - ✓ Pipturus aroma
  - ✓ Guettarda ort
  - ✓ Bar. asiatica hul
  - ✓ Scaevola hernan
  - ✓ Ip. pes-c. huálima
  - ✓ Tournefortia Ched
- heavy black pumice  
called "oan" used to sharpen  
knives.
- ✓ Term. sam. kil
  - ✓ Calophyllum raguoh
  - ✓ Zinnia hora  
hora

The center of the islet is a great taro marsh, not obviously excavated, surrounding ground peaty. Cyrtosperma dominant. A great many weeds.

Coconut plantation nearly has quite a few breadfruit trees and many shrubs, esp. Premna, Callicarpa and Morinda.

Pandanus dubius rare. Barringtonia ~~in~~ racemosa in edge of marsh.

Toward ~~east~~ east end of islet the ground gets rocky, coconuts less common, breadfruit still common. Under story of Morinda, Allophylus, Callicarpa, Premna. Pipturus becomes more dense and taller, Premna and Morinda tree size. On s.e. corner, Guettarda forms forest, but is in singularly poor condition. Scaevola thickets, to 5 m. and Tournefortia fringe top of beach on boulder ridge.



This thicket very dense.  
*Polypodium scol.* very  
 common everywhere.

There has been much  
 brush-cutting, burning,  
 etc.

Around taro pit  
 a hibiscus hybrid is  
 very abundant, also  
*H. tiliaceus*.

Along beach ridge  
*Tournefortia* reaches  
 at least 15 m tall,  
*Guettarda* 10 m.

<i>Hernandia</i>	<i>orhadi</i>
<i>Lenchus</i>	<i>mungan</i>
<i>Cassytha</i>	<i>tirk</i>
<i>Thespesia</i>	<i>pula</i>
<i>Bougainvillea</i>	<i>song</i>
<i>Tacca</i>	<i>mokumok</i>

In evening, as we  
 were going down the  
 lagoon toward the pass  
 we saw a great flock of  
 brown boobies, apparently  
 fishing in the lagoon,  
 probably between 100 + 200  
 individuals.



184 1965 Caroline Is.

with m. wand Aug. 1 - Lamotrek Islet,  
in village around  
dwellings and in gardens

46734 *Ipomoea batatas* (L.) Poir.  
cultivated

41+35 *Asclepias curassavica* L.  
cultivated

31+36 *Mirabilis jalapa* L.  
planted

32+37 *Euphorbia cyathophora* Mun.  
weed, locally abundant

21+38 *Eleusine indica* (L.) Gaertn.  
common weed

3 +39 *Eragrostis tenella* (L.) Beauv.  
common locally

30 40 *Phyllanthus amarus*  
common locally

32 41 *Polyscias fruticosa*  
planted

1 +42 *Nicotiana glauca* L.  
planted

30 +43 *Paspalum conjugatum* Berg  
rare, in *Jorisia* turf

1 44 *Ocimum ~~canariense~~* L.  
planted

32 +45 *Catharanthus roseus* (L.) Don.  
common

32 46 *Jorisia tenuifolia*  
abundant locally

1 +47 *Plumeria rubra* L.  
occasional

1 48 *Fimbristylis cymosa* R.Br.  
rare

Lamotrek Atoll

185

creeping to ascending, sterile.  
"kamoto"

herb, much branched ~~herb~~  
from base, flowers red,  
corolla orange.

— much branched herb,  
flowers crimson.  
bract, red at base.  
"wampii"

"puguruman"

"pural"

"walpar'hi"

shrub 1 m. tall; sterile.  
"hoyang"

herb 1 m. tall; corolla  
limb bright rose pink.  
erect tuft. "tabai"

"pugur parap"

aromatic herb 3 dm.

tall, purplish, "wharung"  
herb 4-5 dm. tall, corollas  
bright rose pink, "pau pau"  
forming dense mat.

"pugor pahru" or "pukor pahru"

shrub 3 m. tall, lactiferous,  
sterile. "luni"

"pukor"



186 1965 Caroline Is.

- 46749 *Portulaca samoensis* v. Poelln.  
common locally on bare  
coral gravel
- 1 50 *Hedyotis biflora* (L.) Lam.  
rare on bare coral gravel
- 1 51 *Alocasia macrorrhiza*  
common
- 1 52 *Zephyranthes rosea*  
planted
- 1 +53 *Gomphrena globosa* L.  
planted
- 72 54 *Tagetes*  
planted
- 1 55 *Cucurbita maxima*  
planted
- 32 +56 *Caesalpinia pulcherrima* (L.) Sw.  
planted
- 1 57 *Xanthosoma violaceo*  
planted
- 1 58 *Xanthosoma sagittifolius*  
planted
- 1 59 *Colocasia esculenta* (L.) Schott  
planted, on dry land
- 2 60 *Pteris tripartita*  
occasional
- 2 +61 *Celophyllum inophyllum* L.  
occasional
- 1 +62 *Hernandia sonora* L.  
rare
- 1 +63 *Polypodium scolopendria*  
common around bases of trees

Lamotrek atoll 187

- prostrate, fleshy, flowers  
yellow. "hop"
- flowers white. "hupursai"
- plants with leaves  
to 2 m. tall, bright green,  
erect; sterile. "fithen"
- flowers pink, fruit  
immature. "pingtata"
- heads magenta. "wii"
- herb to 7 m. tall, with  
rank odor, flowers orange.  
extensive creeper; leaves  
spotted; fruit depressed-  
globose; pedicel abruptly  
expanded at attachment  
to 2-3 times its diameter.
- shrub 2 m. tall,  
flowers scarlet. "warupin"
- petioles purple.
- petioles green.
- "wotomori"
- rhizome short, erect.
- shrub, sterile (others  
seen that were trees 8 m. tall)  
leaves glossy; sterile.  
"or'hadi"
- ~~common~~

"Purpurary"  
"Calavara"  
"mas"

"ragushi"

Burm. f.



188

Labels  
by 1965

Caroline Is.

7+8

46764 *Pseuderanthemum cantherianum* (Lam.)  
occasional53 65 *Eugenia cf. agavea*  
occasionalsame, on boulder  
ridge at ~~south~~ east end  
of lagoon beach54+66 *Tournefortia argentea* L.f.  
common, locally dominant2 +67 *Ipomoea* ~~sp.~~ *per-caprae*,  
spp. *traviliense* (L.) v. Oost.  
very local at top of  
cobble beach4 +68 *Terminalia samoensis* Rech.  
rare in forest5 69 *Scaevola taccada* (Gaertn.) Roxb.  
dominant in edge of  
forest2 +70 *Guettarda speciosa* L.  
dominant in much of forest1 +71 *Barringtonia asiatica* (L.) Kunt.  
occasionalsame - <sup>at top of</sup> sandy beach72+72 *Cordia subcordata* Lam.  
rare3 +73 *Ipomoea littoralis* Bl.  
locally common4 +74 *Cassytha filiformis* L.  
locally common1 +75 *Hymenocallis littoralis* (Jacq.) Halim. occasional

Lamotrek Atoll

189

shrub 2-3 m. tall, green;  
flowers white. "habai"  
small tree 6 m. tall;  
fruit immature,  
borne on smaller branches.  
"fariap" fruit eaten.

3 m

↓

small tree 5 m. tall, other  
seems much taller; leaves  
fleshy, frosty green; flowers  
white. "ched"very local at top of  
cobble beach  
creeping; sterile. "hualimá"shrub 3 m. tall; fruit  
immature. "hul"shrub 1.5 m. tall (others  
seen to 5 m.). flowers white.  
"himai"tree 5 m. tall, sterile.  
"oot"large shrub, all seen sterile.  
"hul"

1 m

tree 6 m. tall; sterile.  
"harai"creeping and twining;  
flowers purple.

tangled leafless green

stem; flowers white  
scapes and leaves, 1 m. tall, fls. white. "lino"



Labels  
190 1965 Caroline Is.

- 46 <sup>7+8</sup> 77 <sup>6</sup> ~~77~~ *Flourya ruderalis*  
occasional  
81 + 78 *Thespesia populnea* (L.) Forst. ex Lam.  
rare, one tree seen  
2 78 *Cenchrus echinatus* L.  
very local  
82 + 79 *Tacca leontopetaloides* (L.) O. Ktze.  
very local  
81 + 80 *Triumfetta procumbens* Forst.  
locally common  
65 81 *Stenotaphrum micranthum*  
locally common

same - in interior

- coconut-breadfruit forest  
42 82 *Lepturus repens*  
common  
61 + 83 *Morinda citrifolia* L.  
abundant in understory  
82 84 *Allophylus timorensis* Bl.  
common in understory  
82 85 *Inocarpus fagiferus* (Park.) Froeb.  
occasional  
81 86 *Piper*  
rare  
82 87 *Premna obtusifolia* R. Br.  
very common in understory  
42 + 88 *Wedelia biflora* (L.) DC.  
locally common in thin  
place  
2 89 *Leucobryum*  
rare, on coconut trunks

Lamotreh Atoll

191

stems red, fleshy.  
"afelepele laqur"  
small sterile tree.

all seen sterile "mokuuoli"

prostrate with ascending  
branches, flower yellow,  
mostly seen sterile. "hori"  
forming a mat.

forming a loose mat,  
mostly sterile.

small tree, flowers white,  
fruit fleshy, white when ripe.  
"lei"

large shrub 3 m. tall;  
flowers white. "ngei" or "lei"

large tree, all seen sterile  
"huro"

aromatic vine; sterile.  
"tolboy"

small tree, aromatic,  
flowers and  
fruit green. "iai"

elongated tangled herb;  
heads yellow. "atiot"

"pogri"



Labels  
192<sup>1965</sup> 1965 Caroline Is.

- 46790 *Crinum cf. asiaticum* L.  
occasional
- 3 +91 *Polypodium scolopendria* Burm.  
abundant, climbing on  
bases of coconut trees
- 1 92 *Ficus tinctoria* Forst. f.  
rare
- 3 93 (moss)  
common on coconut trunks
- 5 94 *Nephrolepis cf. biserrata*  
very common, terrestrial
- 2 95 (moss) ~~*Pleurozium*~~  
occasional on coconut trunk
- 3 +96 *Vigna marina* (Burm. f.) Merr.  
common
- 4 +97 *Clerodendrum inerme* (L.) Gaertn.  
common in forest and  
peaty edges of taro swamp
- 71 98 *Callicarpa candicans*  
very common
- 43 99 *Allophylus timorensis* Bl.  
common in undergrowth
- 46800 *Artocarpus altilis* (Park.) Forst.  
dominant or codominant tree
- 2 01 *Artocarpus marianensis* Tree  
dominant or codominant tree
- 3 +02 *Pisonia grandis* R. Br.  
occasional
- 46 03 *Pipturus argenteus*  
common
- 2 +04 *Carica papaya* L.  
common
- 1 05 *Cratogeomys* Volck.  
occasional

Lamotek Atoll

193

1 m herb 1 m. tall, all seen  
sterile. "iup"  
"shirishi"

sterile shrub "awan"

fronds erect.  
"hamara" or "hamala"

~~"hamara"~~

creeping & twining vine;  
flowers yellow. "holu"

arching shrub 1 m. tall,  
corolla white, stamens  
maroon. "habui"

shrub 1 m. tall, flowers  
lavender-pink. "ligitar"

shrub 3 m. tall, flowers  
white, fruit immature.

small tree 10 m. tall,  
other seen enormously large.

tree 30 m. tall, leaves  
picked up on ground beneath.

large sterile tree.  
"hadu"

shrub 3-4 m. tall, ♂.  
"aroma"

unbranched tree 4 m. tall,  
milky, flowers white. "pauwai"

small sterile tree. "afui"



*Polyporus*

rare

1 07

*Polyporus*

abundant on old fallen  
partly burned breadfruit trunk

same - in <sup>extensive</sup> peaty or muddy  
taro swamp.

1 08

*Pandanus dubius*

rare in edge of

2 09

*Lindernia antipoda*

common weed

1 10

*Cyperus brevifolius*

rare

53 11

*Hedychium coronarium*

locally common

1 12

*Canna*

very local

43 13

*Cyperus odoratus* L.

occasional

72 14

*Pteris tripartita*

occasional

43 15

*Alpinia purpurata*

local

12 3 16

*Ludwigia octovalvis*

very common

2 17

*Sascharum officinarum* L.

commonly planted

7 18

*Cyrtosperma*

abundantly planted

merkusii (Hassk.) Schott  
det. D.M. Nicholson (US) 6/1998

2 19

*Dryopteris gozzilodes*

occasional

sterile young tree 4 m. tall.  
"poho"

corolla delicate, caducous,  
lavender.

"chariv"  
"chalub"  
"chamur"

herb to 1 m. tall; flowers  
white, very fragrant.

herb 1 m. tall, flowers  
yellow, showy. "purang"  
"pogon diwoipod"

rhizome short, erect.  
"siviliquai"

"Telan"

herb 2 m. tall, inflorescence  
deep crimson, no flowers.

herb to 1 m. tall,  
petals yellow, caducous.

canes 2-2.5 cm. thick, 1 m.  
tall; sterile. "wow"

leaves to 1.5 m. tall,  
blade erect, bright green,  
mature inflorescence  
cernuous. "purak"

rhizome prostrate  
"hamak"



46820

*Cyperus polystachyos* L.

2

occasional

3

21

*Curcuma cf. domestica*  
common

4

22

*Ceratopteris thalictroides*  
common

3

+23

*Vernonia cinerea* var. *parviflora*  
common

1

24

*Colocasia esculenta* (L.) Schott.  
commonly planted

9

25

*Bacopa*?  
abundant

78+26

*Hibiscus tiliaceus* L.  
very common in edges of

6

27

*Nephrolepis*  
on coconut stump in  
edge of

76

28

*Barringtonia racemosa* L.  
occasional in edges of

51

29

*Hibiscus rosa-sinensis* x *schizopetalus*?  
very common in edges of

3

+30

*Acrostichum aureum* L.  
occasional in edges of

73+31

*Bruguiera gymnorhiza*  
several trees seen

86

32

*Polygonum minus*  
very common weed

all seen sterile, rhizome  
yellow, aromatic when  
broken. "ianju"  
fertile fronds erect, "martini"  
heads purple, "cho aniti wai"

sterile, glaucous.

stem succulent;  
corolla ~~flowers~~ dull whitish  
not much exerted. "harhohu"  
tree 6 m. tall, flowers  
yellow. "filifen"  
fronds erect, arching,  
luxuriant.

tree 8 m. tall, racemes  
pendent, flowers pink,  
fruit fleshy, very  
bluntly square in  
cross section. "sar"  
shrub 1-1.5 m tall;  
flowers scarlet, "pou'cha"  
erect, 1 m. tall. "hapaho"

tree 6 m. tall; calyces  
bright red.  
stems decumbent and  
ascending, flowers  
pinkish white. "omed"



198

1965 Caroline Is.

Labels  
typedsame - on coconuts  
trunks in dense plantation

- 46833 (lichen)  
 34 (lichen) (hag)  
 35 (lichen)  
 2 36 (moss)  
 2 37 (moss)  
 38 ~~7~~ rentepohlia

- 9 39 Tamarix  
 40 Vigna  
 41 Crotalaria  
 42 Crotalaria

Ramatol Atoll

199

1-3 m



19 200

Calc

46

1

1

1

2

2

1

9

6

4

3







